HOWARD TOWN CENTER RFP
VIABILITY STUDY

JOHNS HOPKINS UNIVERSITY
MASTER'S OF SCIENCE IN REAL ESTATE
PRACTICUM
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The future site of the Howard Town Center

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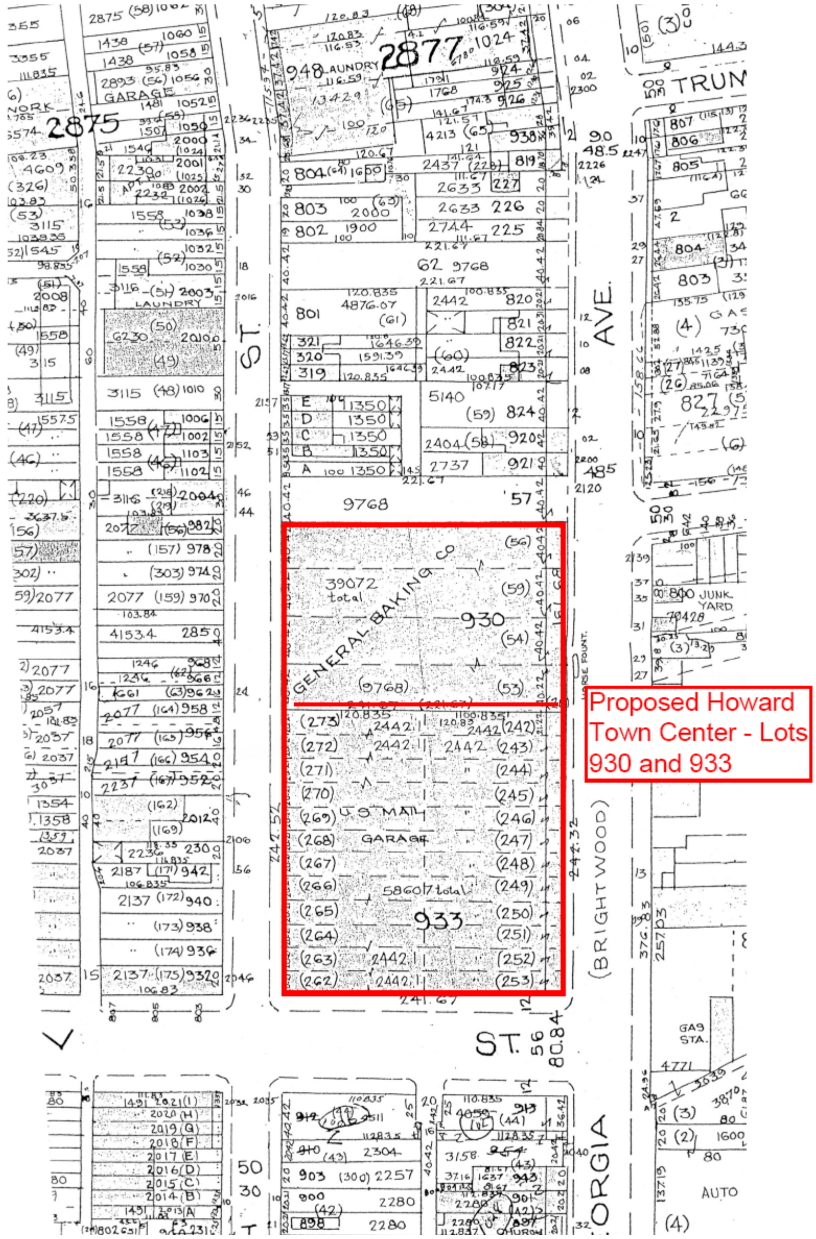
EXECUTIVE SUMMARY

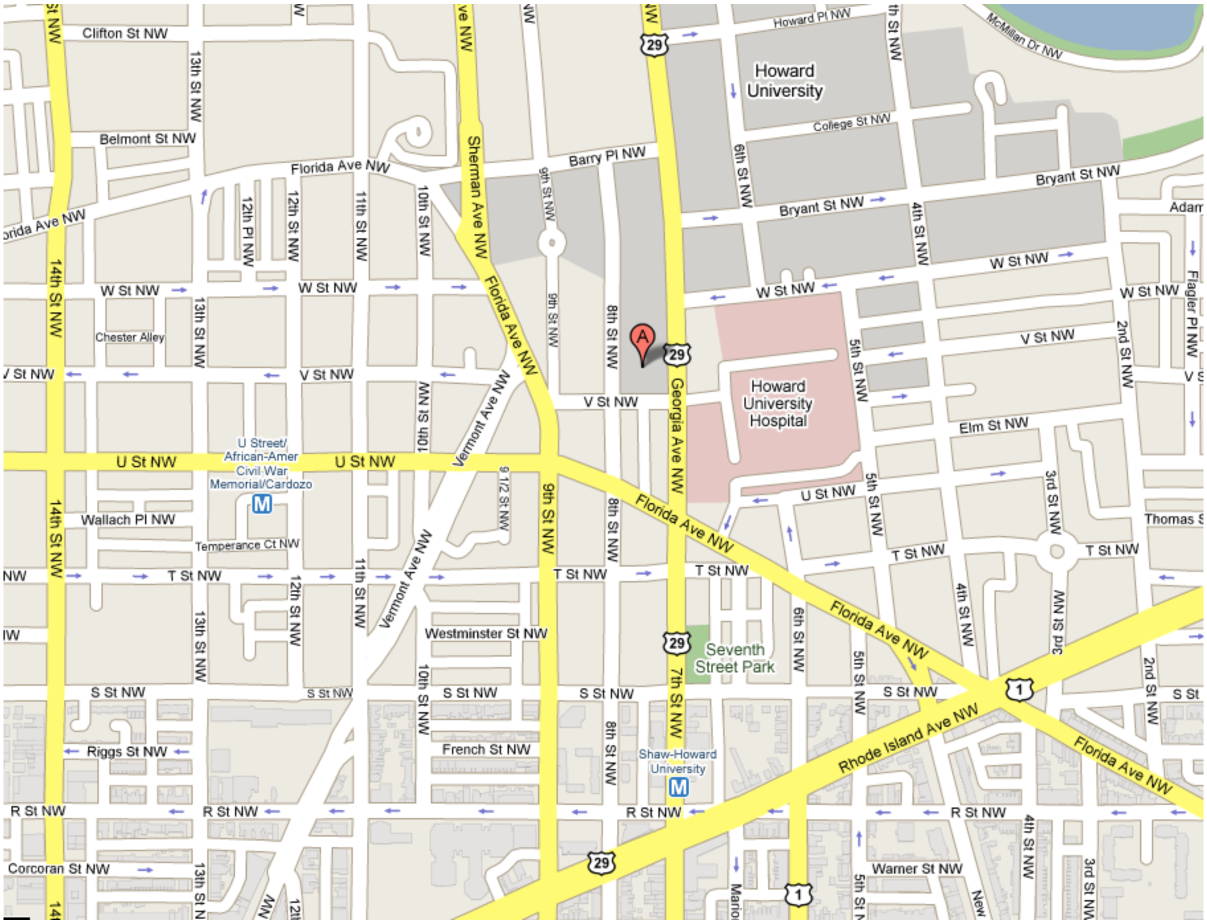
Overview

On May 6, 2008, Howard University issued a Request for Proposals (RFP) to solicit offers on a site across the street from its main campus designated as the "Howard Town Center." The 2.2-acre site (97,679 square feet) is located at 2112-2146 Georgia Avenue, NW (Square 2877, Lots 930 and 933), and encompasses two parcels, one owned by Howard University and one owned by the District of Columbia[1]. The RFP indicates that Howard owns the southern portion of the site (Lot 933) and is acquiring the adjacent District-owned Lot 930 through an agreement with the city dated February 19, 2008. The site is bounded by Georgia Avenue NW, to the east; V Street NW, to the south; 8th Street NW, to the west; and surface parking lots to the north. There is currently a two-story building occupying the entirety of each parcel totaling about 195,000 square feet that would need to be demolished.

The site is across the street from Howard University Hospital and Howard University's main campus and provides abundant frontage on Georgia Avenue, NW, a busy commercial corridor that is a major north-south artery connecting Silver Spring, Maryland, with downtown Washington, D.C. Additionally, two Metro stations are within walking distance of the site: U Street/Cardozo/African-American Civil War Memorial is 0.3 miles away and Howard University/Shaw is 0.3 miles away; both stations handle the Metro's Green and Yellow lines. Metrobus lines that traverse Georgia Avenue, NW include the 70, 72 and 76 routes and provide access to downtown.



Source: Howard Town Center RFP



Source: Google Maps

Viability Review

The RFP contains minimum development criteria: a total of 500,000 square feet of gross leasable area, 70,000 square feet of which is retail (including a minimum 35,000 square foot grocery store), and has over 300 market rate residential rental apartments[1]. As a first objective this study sought to determine if those standards were viable to even warrant a response to the RFP. Additionally, if the minimum standards were viable, what would be the quantified demand for the project? The second objective was to establish what an appropriate ground lease offer to Howard University would be for conveyance of the site. In performing a full market demand and financial analysis, this study determined that the minimum criteria were viable and recommended a development program of 425 apartments, a 54,600 square foot grocery store and

15,400 square feet of retail; and proposed annual payments over 99 years of $3,310,502 for the site. To determine the site's value, a market value of $100 per floor-to-area-ratio (FAR) square foot was used. It was assumed that the RFP would garner a significant amount of interest from developers and that a winning bid would require a competitive ground lease offer to Howard University. A local developer confirmed that this market value was competitive[2]. Of course, adjusting this value will significantly affect the return to the developer, so depending on the required hurdle rate the offer should be altered accordingly. The full project summary is presented here and will be discussed in greater detail throughout the rest of the study.

Development Program	
Footprint:	70,000 SF
Total Building Square Footage:	550,027 SF
Height:	90.0 feet (8 stories)
Rental Apartments:	425 at 480,027 gross SF
Grocery Store:	54,600 SF
Retail:	7 bays of 2,200 SF totaling 15,400 SF
Development Costs	
Hard Costs:	$114,409,856 ($208.00/SF)
Soft Costs:	$21,733,812 ($39.51/SF)
Implied Land Costs:	$55,002,666 ($100/SF) – paid as ground lease
Total Development Costs:	$191,146,334 ($347.52/SF)
Financial Assumptions	
Base Residential Rate:	$3.18/SF average for all unit types
Base Grocery Store Rate:	$36.75/SF including $50/SF tenant improvements
Base Retail Rate:	$55.32/SF including $20/SF tenant improvements
Rental Rate Growth:	2.5% per annum
Residential Operating Expenses:	$10,579 per unit per year (stabilized year)
Operating Expenses Growth:	2.5% per annum
Absorption Rate:	17 per month
Permanent Mortgage Rate:	6.5%
Loan-to-Value:	75%
Minimum DSCR:	1.20
Amortization:	30 years

Financial Results	
Reversion Year:	2020 (10-year hold period)
Reversion NOI:	$15,323,384
Reversion Cap Rate:	6.5%
Reversion Value:	$235,744,369
Total Equity Requirement:	$42,322,866 (initial plus negative cash flow for Years 1 & 2)
Levered IRR:	15.23%
Unlevered IRR:	10.02%
Return on Cost (Stabilized):	6.74%

Photographs of Existing Site

Western Boundary along 8th Street, NW

Northern Boundary along Surface Parking Lots

Eastern Boundary Along Georgia Avenue, NW/7th Street, NW

Southern Boundary along V Street, NW

Looking North along Georgia Ave, NW/7th Street, NW

MARKET ANALYSIS

Washington, D.C. Metropolitan Statistical Area Overview

The Washington, D.C. Metropolitan Statistical Area (MSA) is a dynamic market. With an estimated 2007 population of 5,306,125, the D.C. MSA ranks as one of the largest in the United States, and a median household income of $83,200 demonstrates the economic strength of the market[3]. As the mortgage crisis drags on, the acknowledged driver of economic success, job creation, becomes that much more important. In this respect, the Washington, D.C. region holds a recognized advantage derived from its unique place as the seat of the Federal Government that provides stable jobs for many area residents as well as creates jobs through federal procurement. Roughly 7,000 new jobs are created per $1 billion in additional Federal contract spending. Approximately 33% of the Washington area's gross regional product of $356.3 billion in 2006 was attributable to the Federal Government which has an effect of insulating against economic downturns[4]. Indeed, as most of the country lost jobs during the recessionary period of 2001-2003, the Washington region actually added almost 66,000 jobs[5]. This strength is also illustrated in the current economic recession, where the unemployment rate as of August 2008 was 4.2% in the Washington, D.C. MSA compared to 6.1% nationally[6]. While job creation is somewhat lower than the recent 2004 peak of 71,000, George Mason University's (GMU) Center for Regional Analysis (CRA) projects that by 2010-2011, almost 45,000 jobs will be created in the MSA and 6,000 of those jobs will be in D.C.[5]. Over half of the D.C. area's jobs are in management, professional, and related occupations (50.3%); the service sector provides 14.5%; sales and office occupations account for 21.8%; and the other 13.5% of the region's jobs fall within the construction or "production" industries[3]. This employment distribution should be seen as a strength – in contrast to many Northeast "Rust Belt" cities that relied heavily upon the manufacturing industry and have been subsequently hurt by that sector's job losses, D.C.'s economy was never dependent on manufacturing and so its transition to the 21st century "information economy" has been a smoother one.

The GMU-CRA employs two metrics to evaluate the current ("Coincident Index") and near-term forecasted ("Leading Index") state of the regional economy against a 1996 baseline of 100. The Coincident Index includes four components: nondurable goods retail sales, consumer confidence, wage and salary employment, and domestic passenger volume at Reagan National and Dulles Airports. As of August 2008, this Index was 114.5, down 5.2% from August 2007 and below its 10-year average of 120.6. The Leading Index includes five components: consumer expectations, initial claims for unemployment insurance, total residential building permits, the Help Wanted Index, durable goods retail sales. As of August 2008, this Index was 106.1, down 2.7% from August 2007 and below its 10-year average of 110.4[5].

Another important facet of the D.C. MSA to understand is how the District of Columbia itself relates to the metro region as a whole. The city was once the jobs and population center for the region: in 1950, it contained 46% of the region's population and 83% of its employment[7]. As like with all American cities, since that time the region's suburbs and exurbs have experienced tremendous growth, with the result that by 2000, D.C. had just 12% of the region's population and 25% of its jobs with even the most ambitious projections showing this trend continuing into the future[7]. And it is not just that the suburbs have grown – the city has also shrunk. While in 1950, 802,000 people lived in Washington, making it the 9th most populous city in the U.S., by 2000 the city's population stood at just 572,000, making it the 21st largest city in the country. To further illustrate this loss, between 1970 and 2000 the city lost approximately 25% of its population[7]. Although these population statistics appear troubling from D.C.'s perspective, the number of households residing in the District has suffered much less of a drop: only 2% from 1980 to 2000. And in fact, after observing that average household size in Washington went down from 2.72 in 1970 to 2.16 in 2000, even this modest decline may be attributed to larger households being replaced by smaller households[7]. What the dual statistics of population and households do suggest is that large numbers of middle-class families left the city during this time with a corresponding drop in the number of children enrolled in D.C. Public Schools. This trend of falling household size is expected to stabilize by 2010[7].

Importantly, the city may have already seen the halt of its population loss. Although the definitive answer will not come until the next Census is conducted in 2010, the estimate provided by the American FactFinder service of the U.S. Census Bureau suggests there were 588,292 people living in the District as of July 1, 2007; this would represent an increase of approximately 16,000 people or 2.8% since 2000[3]. For a city that has steadily lost population for more than three decades, this would be a huge improvement and an encouraging sign of things to come. Indeed, using residential projects both under construction and in the planning stages to make population and household projections, the D.C. Comprehensive Plan sees even more favorable growth patterns through 2025. Overall, the Plan anticipates the city capturing 10% of the MSA's growth from 2005-2025 and result in growth patterns as shown below[7].

	2005	2010	2015	2020	2025	20-Year Change
Households	254,700	265,800	279,700	295,700	311,800	57,100
Population	576,700	599,300	630,000	664,000	698,000	121,200

Source: 2006 D.C. Comprehensive Plan

Although projected to add over 100,000 people in the next 20 years, the District's land area is growth-limited because it is surrounded on all four sides by a natural growth boundary: to the south by the Potomac River and in the other directions by jurisdictions in the State of Maryland. Washington, D.C. is just 69 square miles, which is half the size of Denver or Philadelphia, and one-fifth the size of Dallas or San Diego[7]. Unique among American cities in the fact that it is not part of a state, D.C. cannot annex surrounding land like some municipalities in fast-growing areas of the United States like Phoenix; therefore, any population absorbed by the city will naturally add density and therefore keep land values high. Currently D.C. has over 9,000 people per square mile which makes it the sixth densest city in the U.S. Subtracting federal lands that comprise almost 40% of the city's land area would make density rates even higher[7].

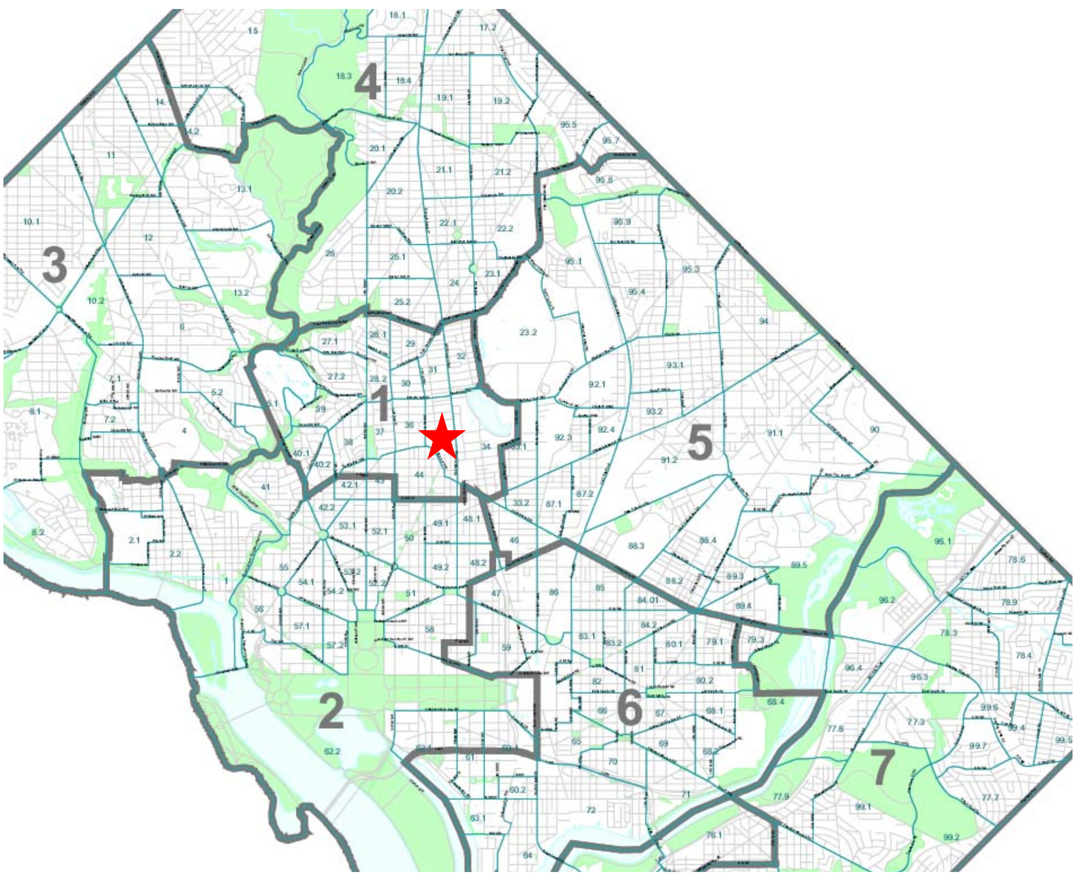
As noted earlier, besides losing population, Washington has also lost its distinction as the region's employment center. In 2005, D.C. had 740,000 jobs, which represents an increase of 30,000 jobs since 2000[7]. Based on this number, it does not take much analysis to conclude that there are more jobs than people in the city. In fact, workers that live in Maryland and Virginia hold more than 70% of the jobs in the District[7]. This means that almost 525,000 jobs located in Washington, D.C. are not generating income tax for the city (or even the state, as would be the case with other American cities). This combined with the fact that the city cannot derive property tax on the estimated 40% of its land area that is federal, is an arrangement exclusive to D.C. and makes for very a unique relationship with the Federal Government.

Notwithstanding the District's loss of prominence as the employment and population center of the region, its economy can still be considered quite robust. Although lower than the MSA's median 4-person household income of $83,200, which is one of the highest in the nation, D.C.'s median income of $54,317 is higher than the national rate of $50,740[3]. As measured from 2005, the city is projected to add a healthy 125,000 jobs by 2025, giving it a total of 870,400 and providing more than enough employment opportunities to match the projected growth of its population[7].

One important economic indicator where D.C. is outperforming some of its wealthier suburban jurisdictions is one of the most obvious and localized outcomes of the current economic crisis: home foreclosures. While in the beginning of the slowdown many foreclosures were thought to be directly attributed to subprime borrowers, it is now clear that foreclosures have spread throughout the housing market. Foreclosures can quickly destabilize otherwise healthy neighborhoods and have a "downward spiral" effect on nearby housing prices. Many of Washington's more established and stable neighborhoods did not experience the same level of rapidly increasing price escalations as counties such as Prince William and Loudoun in Virginia, which also rank as some of the wealthiest jurisdictions in the nation. Combined with other reasons outside the scope of this study, this has led to foreclosure rates in Washington that are much lower than some surrounding counties, and has acted as somewhat of a buffer against the destabilization high rates of foreclosure can cause. As of April 30, 2008, the rate of foreclosure per 10,000 units in Washington, D.C. was 116 (it is safe to assume that all quoted foreclosure rates would be higher today). Compare this rate to the counties mentioned before: 343 in Loudoun and 722 in Prince William. Other counties of note include: Prince George's with 219 and Montgomery with 68 in Maryland; and Fairfax with 289 and Arlington with 68 in Virginia[5]. After observing that the counties with the lowest rates are closest to the District geographically, it is clear that while it may have lost its undisputed position as the center of the MSA, it still maintains an unequivocally important role to the region that has a favorable effect on its economic health.

Submarket Review

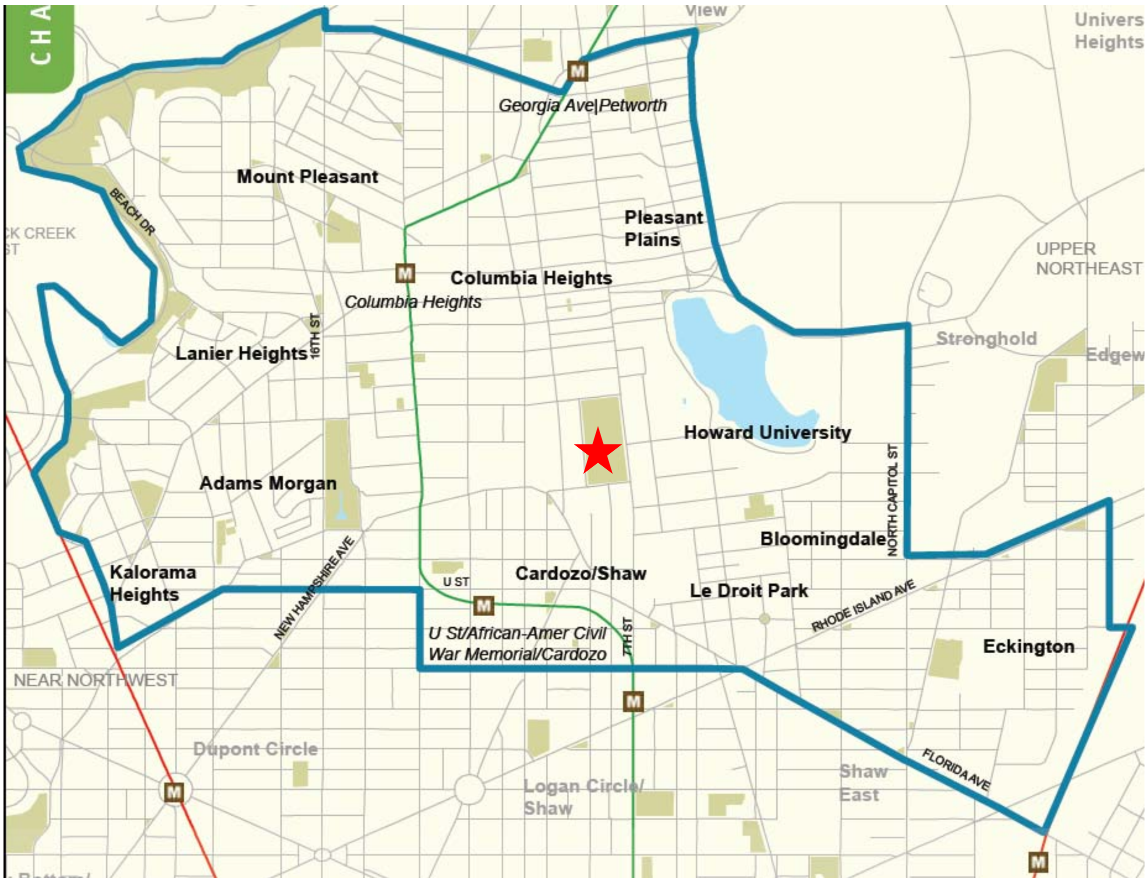
The Howard Town Center site is located in Ward 1 of the District, which is in the center of the city, and while it is one of the city's smallest wards by land area, it is the most populous and dense[7]. Demographically, it is one of the most diverse in the city: 31.7% or residents were defined as white, 45.7% defined as black, 3.5% defined as Asian and 13.9% defined as some other race[8]. Additionally, 34.4% of residents spoke a language other than English at home. According to data from the 2000 U.S. Census, the D.C. Office of Planning developed a profile for Ward 1 that listed the population at 73,364, total households of 31,395 and a median household income of $36,902. Of the 31,413 housing units in the ward, 71.6% were occupied by renters. The median age was 31.8 and its residents are relatively well-educated with 38.5% having a bachelor's degree or higher[8]. Ward 1 is shown below:



Source: D.C. Office of Planning

The 2006 D.C. Comprehensive Plan defines the Planning Area where the subject parcel is located as "Mid-City," which encompasses all of Ward 1 but also includes some of Wards 2 and 5. This area's borders are Rock Creek Park on the west; the CSX rail corridor on the east;

Florida Avenue and U Street, NW, on the south; and Spring Road and Rock Creek Church Road, NW, on the north[7]. It is important to note that the generally accepted name of the site's neighborhood is "Shaw," which spills over into another planning area, or just "Howard University." The Mid-City Planning Area is shown below:



Source: 2006 D.C. Comprehensive Plan

According to the 2006 D.C. Comprehensive Plan, Mid-City had 35,200 households and 28,300 jobs in 2005. Projected growth over the subsequent 20 years would add 6,400 households and 4,600 jobs to the submarket; this would account for 11.2% of the city's household growth and 3.7% of its employment growth[7]. Mid-City is characterized over its 1,971 acres primarily with non-detached single- and multi-family residential development, as the table below illustrates:

LAND USE	ACRES
Road Rights-of-Way	628.0
Single-Family Detached Homes	15.5
Single-Family Attached Homes/Townhomes	496.8
Low-Rise Apartments	136.2
High-Rise Apartments	59.5
Commercial	144.0
Industrial	20.6
Local Public Facilities	53.8
Federal Facilities (Excluding Parks)	1.3
Institutional	141.7
Permanent Open Space	140.9
Rail, Utilities and Communications	96.8
Vacant	36.0
Water	45.8
TOTAL	1,971.1

Source: 2006 D.C. Comprehensive Plan

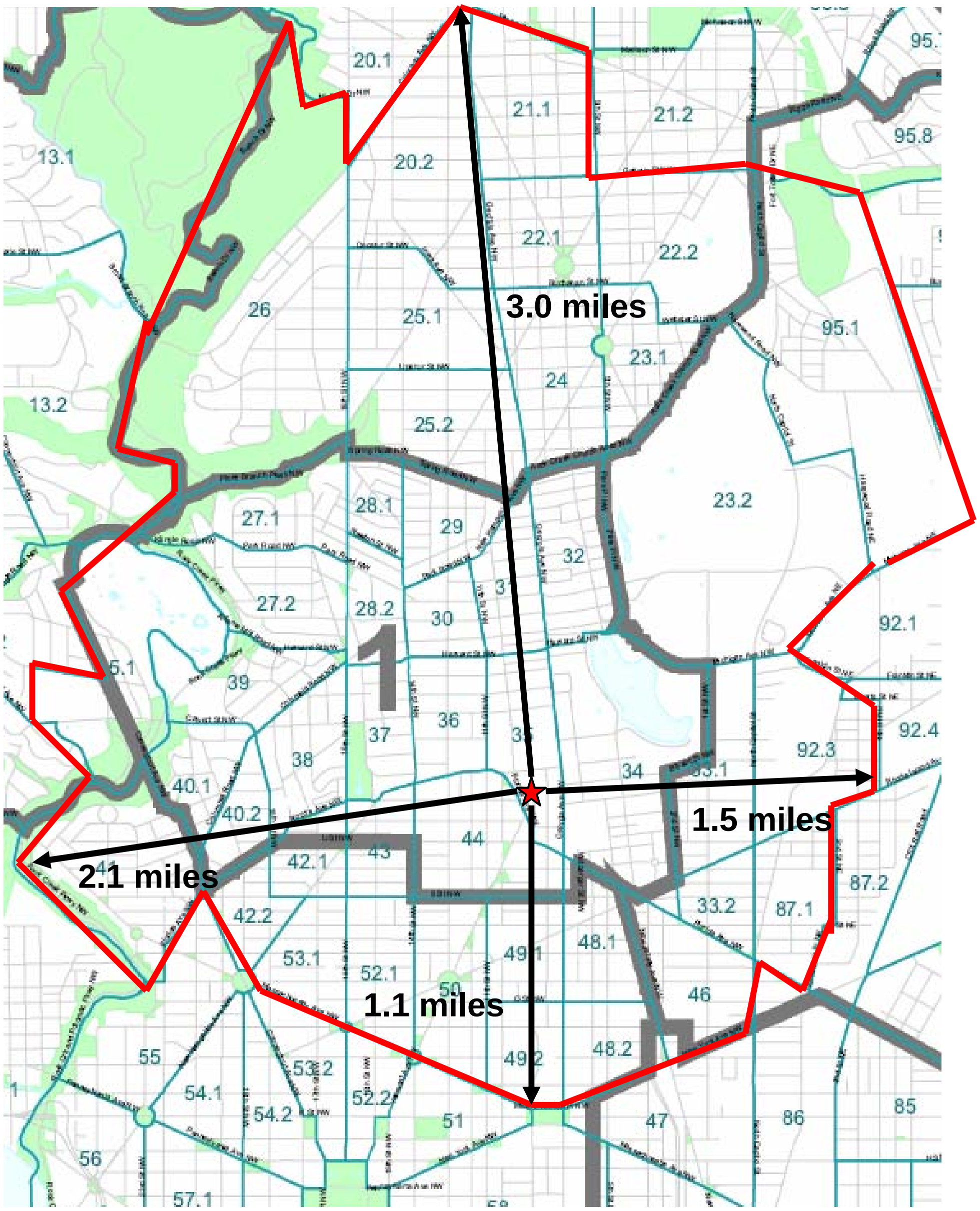
The Washington, D.C. Economic Partnership (WDCEP) provides a more narrow understanding of the submarket, which it defines as "Howard University/Pleasant Plains." Important economic indicators from 2007 for this submarket are: a population of 17,891; 5,566 households; and a median household income of $32,383[9]. The submarket is shown as the 0.5 mile radius below:

Source: Washington, D.C. Economic Partnership

Another critical component of understanding the subject parcel's submarket is the influence of Howard University and the Howard University Hospital, especially considering they are located adjacent to the site. Further exploration of the affect of the demographics presented here will be analyzed in the Market Demand Overview and Analysis section. Howard University has a student population of 10,586, with 7,112 being undergraduates and 3,474 being graduates or professional students (e.g., medical, dental, law)[10]. Of these students it is safe to assume that the vast majority are not permanent residents of Ward 1, meaning they were not counted in any of the data so far presented. Additionally, Howard University Hospital has 479 beds with the accompanying patient visits and approximately 2,500 physicians, nurses and other staff that work at the hospital[11].

Trade Market Analysis

For the purposes of this study, the trade market was defined differently than Ward 1 or Mid-City or Howard University. Defining the trade market area for a site being evaluated for development requires an understanding of the underlying trends and economic drivers that cause consumers to make rational marketplace decisions. In the case of the Howard Town Center development, it is important to recognize what types of people would demand to live and shop at that location and then translating that into where these consumers would likely come from. While the demand analysis will be performed in another section, the establishment of the primary and secondary trade markets will be presented in this section and will be the same for both the residential and retail sectors. The trade market for this site is visually depicted by the map below and described in greater detail further in this section.



The primary trade market is the geographic area from which 60%-80% of customers are generated[12]. In a suburban location the circumference of this pull would likely be larger as consumers typically use automobiles as their primary transportation. In urban locales where more customers will utilize mass transportation and walk, this geographic boundary will be smaller. For this study, the primary trade area was selected as the entirety of Ward 1, which was introduced earlier and is also outlined in the map above with a heavy gray line and a numeral.

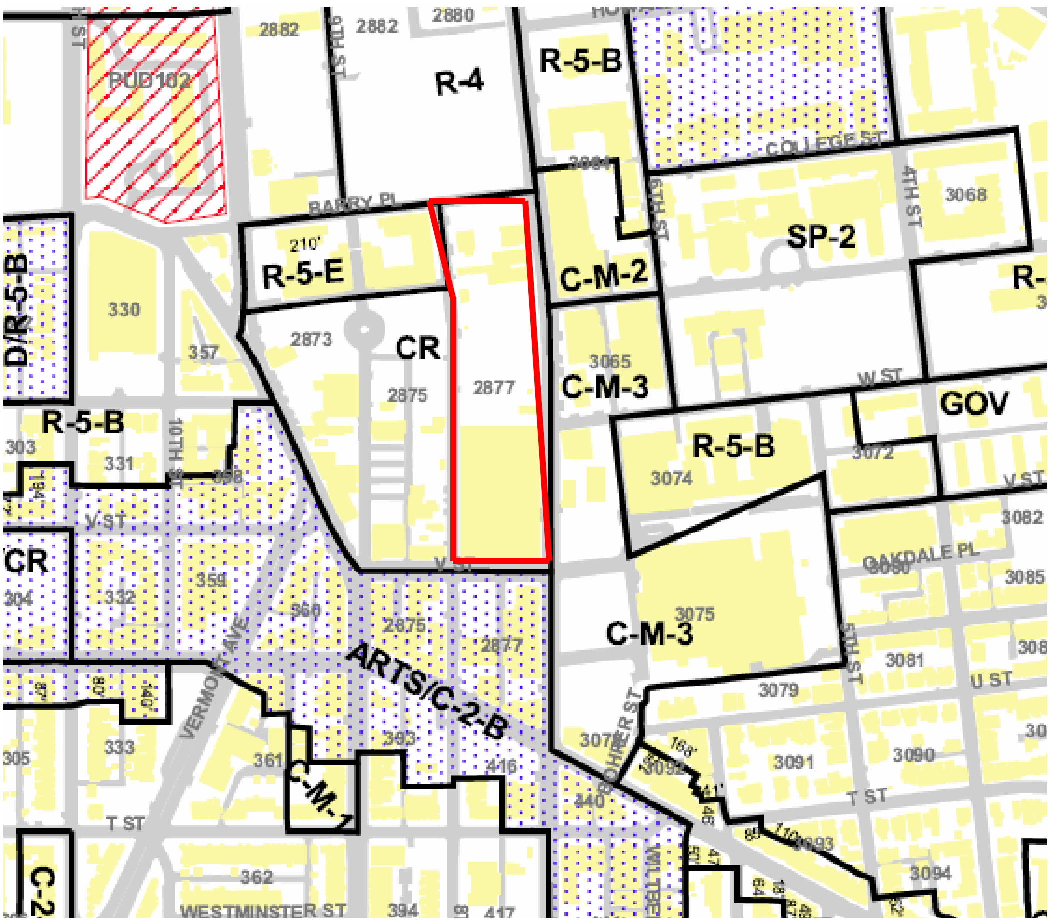
The ward boundary was deemed to be appropriately sized to capture those existing residents that would be the most likely to live and/or shop at Howard Town Center.

The secondary trade market is where 20%-40% of customers come from[12]. The borders of this secondary trade market can be seen as a red line on the map above (outside of the Ward 1 boundary). The determination of the secondary market required more consideration of the characteristics of the neighborhoods bordering Ward 1. It was deemed those people that live in areas demographically similar to the subject's would be likely to consider living and/or shopping there. For example, census tracts north of Ward 1 included in the secondary trade market are 20.2, 21.1, 22.1, 25.1, 24, and 25.2. This area is a neighborhood known as "Petworth" and has similar socio-economic characteristics as the site. Areas north of these tracts were not included because the distance of more than 3 miles was too far from the parcel. The area south of census tracts 48.2 and 49.2, known as "Mt. Vernon Triangle," was left out of the trade market because it is primarily an office sector and is thus different than the site's submarket. The western border of the trade market is essentially Rock Creek Park, which has been a historic boundary in Washington and was thus respected in this study as well. Areas east of the subject site are much less dense and contain many detached single-family houses and so the eastern border does not extend much beyond Ward 1. The distance from the subject to the boundaries of the overall trade market is 3.0 miles to the north, 1.5 miles to the east, 1.1 miles to the south and 2.1 miles to the west.

ZONING AND COMPREHENSIVE PLAN OVERVIEW

Zoning Review

According to the D.C. Zoning Map, the subject parcel is zoned C-R, which the Zoning Regulations state permits "matter-of-right residential, commercial, and certain light industrial development to a maximum lot occupancy of 75% for residential use, a maximum FAR of 6.0 for residential and 3.0 for other permitted uses and a maximum height of ninety (90) feet"[13].



Source: D.C. Office of Zoning

The C-R zone is considered a mixed-use zone allowing residential, retail, office, recreational, light industrial and other miscellaneous uses. The zone is meant to encourage uses and densities that promote goals established by the D.C. Office of Planning in the areas of employment, population, transportation, housing, public facilities and environmental quality. Some uses specifically allowed by the C-R zone by-right include: one-family dwelling, flat or multiple dwellings; retail (excluding certain uses, e.g., car wash, animal hospital, parking lot, gas station); hotel; office; private school; library; museum; park or open space; and swimming pool[13]. Other uses like hospitals, bowling alleys and warehouses may be allowed after coordination with the D.C. Office of Planning.

The Zoning Regulations also require that "the minimum depth of rear yard shall be three inches per foot (3 in./ft.) of vertical distance from the horizontal plane upon which the residential use begins to the highest point of the main roof, but not less than twelve feet (12 ft.)." Side yards are not required in the C-R zone (13). Parking regulations are promulgated by Chapter 21 of Title 11 of the D.C. Municipal Regulations and apply differently depending on what use is being proposed and under what zone. A retail use under the C-R zone requires 1 parking space for every 750 square feet of retail over 3,000 square feet. The parking requirement for residential is 1 space for every 3 residential units[13].

When off of these zoning requirements are applied to the Howard Town Center parcel, the permitted uses and development standards can be summarized by the following table:

CATEGORY	PERMITTED
Lot Size:	97,679 sf
Footprint:	73,259 sf
Permitted Square Footage @ 6.0 FAR (min 3.0 residential):	586,074 sf (at least 293,037 sf residential)
Maximum Height:	90 ft
Parking Spaces (Retail):	In excess of 3,000 sf, 1 spot for each additional 750 sf of gross floor area
Parking Spaces (Residential):	1 for every 3 dwelling units

Source: D.C. Municipal Regulations, Title 11

A development abiding by the above zoning restrictions would be considered by-right, and no further zoning approval would be required. The zoning would receive administrative review as part of the standard building permitting process and would be to simply verify that the proposed development meets the zoning code. However, as stated by the RFP, there is another zoning approval process that could increase the permissible FAR and building height: the Planned Unit Development (PUD) process. In the C-R zone PUD approval would allow a maximum height of 110 feet and an FAR of 8.0[13]. The goals of the PUD option are to provide flexibility to increase density to favorably impact the public good.

PUD approval is granted by the D.C. Zoning Commission after successful navigation through the rather lengthy process. Stage 1 approval determines whether the proposed development is suitable for use of the PUD process, and must meet standards in such areas as the appropriateness, character, scale, mixture of uses, and design of the uses proposed; and the compatibility of the proposed development with citywide, ward, and area plans of the city, and other goals. Stage 2 of PUD approval includes a detailed site plan review to determine compliance with the intent and purposes of the PUD process, the Stage 1 approval, and other requirements set forth by Title 11 of the D.C. Municipal Regulations[13].

The PUD process requires a tremendous amount of detailed information that must be included in the Stage 1 and 2 applications. Each stage of the PUD application is submitted in coordination with staff from the D.C. Office of Planning who then develop reports and provide recommendations to the Zoning Commission. The Zoning Commission then holds public hearings at which time the members will render a decision or may request more information and/or revisions to the PUD application[13].

When evaluating a PUD application the Zoning Commission must look at several standards, one of the most important of which is that the project offers a public benefit significantly greater than if the project were developed by-right. Such benefits can involve some of the following categories:

- urban design, architecture and landscaping
- site planning
- transportation management and pedestrian access
- historic preservation
- employment and training opportunities
- compliance with the D.C. Comprehensive Plan
- environmental benefits[13].

As can be intimated from the descriptions above, this process can be very time-consuming – sometimes stretching into years – and also quite costly in terms of assistance from architects, engineers, lawyers and other consultants to prepare the applications and associated documentation. While a project submitting by-right is reviewed as part of the standard building permit approval, a PUD is a separate process altogether and approval is granted by the Zoning Commission. It is for these reasons that pursing the PUD alternative must be carefully considered.

The most important determination is “will the benefits of the increased density be worth the cost of the PUD approval process, in both money and time?” The answer for the Howard Town Center project is clearly no, and so this study recommends not pursuing it. As stated above, a PUD approval in the C-R zone would allow for an increased density to 8.0 FAR which would allow for 781,432 square feet of development. However, as the Market Demand Overview and Analysis section will describe in great detail, the demand does not justify anywhere close to that much density.

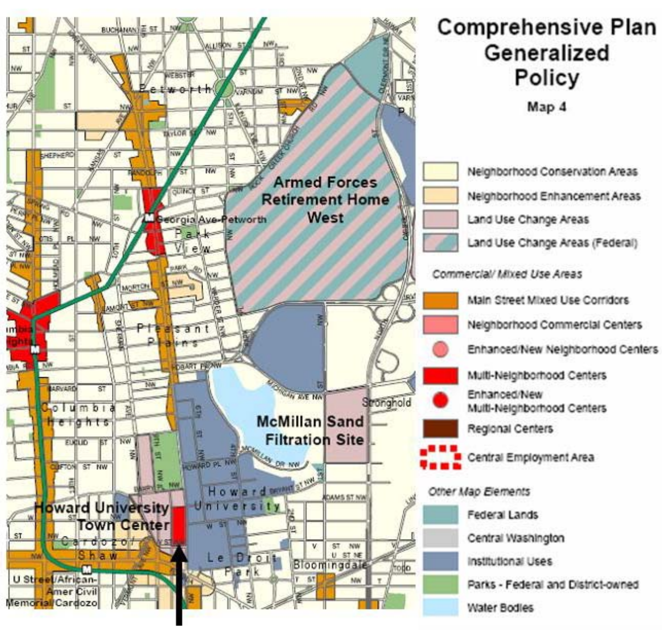
Comprehensive Plan Overview

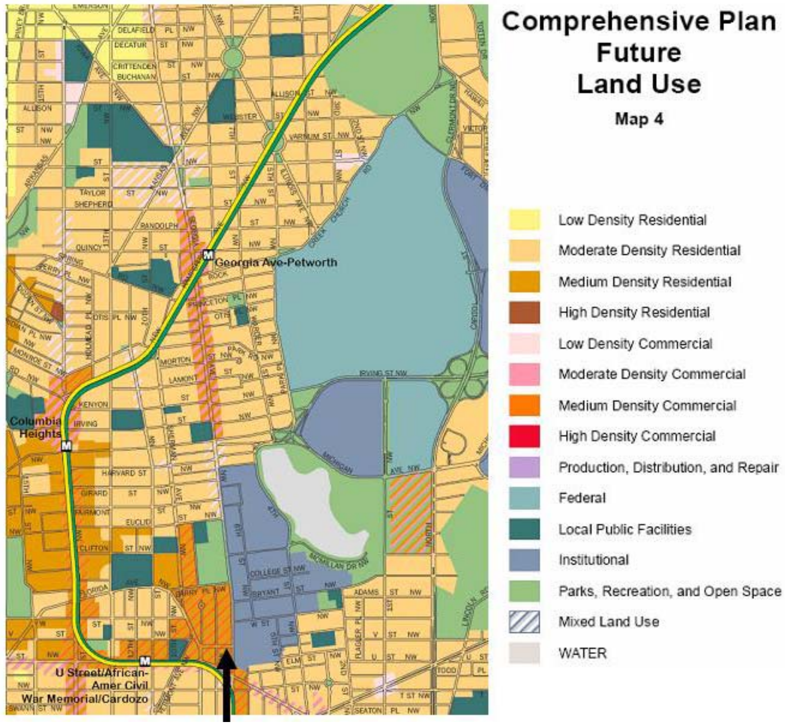
The D.C. Comprehensive Plan is a general policy document that provides overall guidance for future planning and development of the city. The Mayor is vested by the D.C. Code with the authority to initiate, develop and submit a comprehensive plan to the D.C. Council which has the power to adopt the plan through a legislative act. The act of creating the Comprehensive Plan is required by the Home Rule Act (which gave the city the authority to self-govern) and must be adopted by the City Council and reviewed by the National Capital Planning Commission (NCPC) and Congress[7]. In this way, the 2006 D.C. Comprehensive Plan became effective March 8, 2007 (the Council adopted it in December 2006 so it is referred to as the "2006 Plan"). It contains 25 chapters including an introduction, 13 citywide elements, 10 area elements, an implementation element (which designates the responsible D.C. government agencies), and two maps: the Future Land Use Map and the Generalized Policy Map. The area elements correlate to the Office of Planning's designation of planning areas so the Howard Town Center parcel falls under the Mid-City Area Element. Of the citywide elements, those that are relevant to this project will be discussed in this section and include: Framework, Land Use, Transportation, Housing, Economic Development and Urban Design.

Additionally, Small Area Plans – which are adopted by the D.C. Council by resolution not legislation – supplement the Comprehensive Plan by providing detailed direction for areas ranging in size from a few city blocks to entire neighborhoods or corridors. The Small Area Plan that relates to the subject parcel is known as the "Duke Plan," and will also be reviewed in this section.

The first citywide element, the Framework Element, contains valuable demographic and employment information about Washington that was utilized in the Washington, D.C.

Metropolitan Statistical Area Overview section. Additionally, the element discusses a particularly relevant "Guiding Principle" that relates to the proposed development at Howard Town Center. "Managing Growth and Change," addresses the desire to achieve neighborhood revitalization and enhancement by targeting redevelopment and infill opportunities along corridors and near transit stations. The subject site is part of that goal as it is located along Georgia Avenue, NW, a major commercial thoroughfare designated by the Office of Planning as a "Great Street," and near two Metro stations, the U Street/Cardozo/African-American Civil War Memorial Station and the Shaw/Howard University Station. The rest of this element describes the land use areas that correlate with two important maps that help to guide future development: the General Policy Map that plans for how areas may change and the Future Land Use Map, which is a more specific part of the adopted Comprehensive Plan and carries the same legal weight as the Plan itself. The General Policy Map identifies the subject parcel as a "Multi-Neighborhood Center," and the Future Land Use Map designates the parcel as Mixed-Use "Medium-Density Residential," and "Medium-Density Commercial."[7]





Source: 2006 D.C. Comprehensive Plan

As can be seen from the maps, the D.C. Office of Planning has similar plans for redevelopment at the Howard Town Center parcel as the RFP guidance suggests. The Multi-Neighborhood Center category envisions a retail center providing community services such as supermarkets, drug stores, restaurants and apparel stores drawing a customer base from a radius of one to three miles. With a roughly 55,000 square foot grocery store and 15,400 square feet of retail, the recommended development program for Howard Town Center clearly complies with this goal. The Future Land Use Map calls for the parcel to be a mix of residential and commercial uses; specifically, the designation identifies the site as an area for mid-level (4-7 stories) residential and commercial areas (e.g. retail) with a somewhat high density and height (not more than 8 stories). Again, the Howard Town Center project would comply with this vision.

The Land Use Element discusses several citywide goals that would apply to the project. One land use goal focuses primarily on promoting mixed-use, transit-oriented development around the city's Metro stations and using this development as an engine for economic growth[7]. While the subject parcel is not adjacent to a Metro station, it is clearly proximate enough to fall under this goal, and the proposed mix of uses certainly conforms to this vision. And especially considering what currently occupies the site, the contemplated development would be more in line with this land use goal.

The next citywide element, Transportation, is important for its recognition that the city should reinforce development near Metro stations by providing any necessary infrastructure improvements[7]. This element also designates Georgia Avenue, NW from the Maryland border to Mt. Vernon Square as a "Great Street" to focus improvements like sidewalks, street lighting and signage onto the corridor.

The Housing Element describes the new housing that will be required to meet the demands of the population growth projected for the city. As with other parts of the Comprehensive Plan, this section calls for more mixed uses, particularly along main corridors and near Metro stations. To accomplish this goal, the plan recommends rezoning "marginal" commercial land, especially along Great Streets, to residential districts[7]. Because the existing use of the subject site is commercially marginal while the existing C-R zoning allows for mixed use, it seems likely that the site has been recently re-zoned to prepare for its near-future development. Thus, the project would fulfill the intended future use of the site.

Economic development is seen by the Comprehensive Plan as critical for the health of D.C. neighborhoods. This element suggests that the city loses almost $1 billion per year because its residents spend retail dollars in surrounding jurisdictions (including the city's daytime population would cause this to be even higher). The implication being there are not enough retail options in the District to satisfy its residents. The Plan calls for more retail opportunities that provide basic amenities on infill, underutilized and vacant sites, and the promotion locally-owned, non-chain stores[7]. Another element of the lack of retail is tied to the supply of grocery stores, which the Plan identifies as being not sufficient for many city neighborhoods. The planned retail components of Howard Town Center would address all of these goals, and bring these services to a neighborhood that presently lacks them.

The Comprehensive Plan provides guidance in the area of urban design that is important for the Howard Town Center project. This element generally envisions development that is harmonious with its surroundings, respecting features like proportion of openings (windows and doors), exterior architectural details (cornices, parapets, etc), and heights[7]. The subject site is not in an historic district, and the immediate area contains few if any architecturally significant buildings; however, there are several newly constructed apartment buildings that could provide some context and the project design would certainly incorporate appropriate architectural features from Howard University's main campus.

The Mid-City Area Element begins by presenting a demographic and economic framework for the planning area. Many of those statistics and data were captured in the Submarket Review section; it is somewhat less relevant for this study because the identified trade market for this project do not match exactly what the D.C. Office of Planning designates as the Mid-City Planning Area. Instead of those data, this paragraph will discuss the policies and goals promulgated by the Comprehensive Plan for this area that are applicable to the Howard Town Center project. As with the citywide elements of the plan, the plan for this area stresses the importance of mixed-use, transit-oriented development using the area's Metro stations and major corridors as a focal point[7]. The plan for Mid-City describes in even more detail seven policy focus areas, of which one is the Georgia Avenue Corridor. Goals for Georgia Avenue include attracting neighborhood-serving retail businesses and services, reducing vacancies and sharing parking facilities. The plan calls for coordination with Howard University to stimulate development that would benefit both its students and residents of the surrounding neighborhoods. The element even specifically addresses Howard Town Center, suggesting additional development beyond the planned development of apartments, retail and parking on the subject site of this study. Other guidance recommends the scale of the development should take into account appropriate transitions with the lower density row house neighborhoods to the west[7]. With all of the attention paid to the Howard Town Center site in this area element, development as suggested by the RFP is clearly in compliance with the Comprehensive Plan and would be welcomed by D.C. government officials.

The Duke Plan is considered a Small Area Plan that does not carry the same legal weight as the Comprehensive Plan but is included to provide additional direction. In contrast to what the RFP indicates, the Duke Plan does not encourage increased density to an 8.0 FAR and 110 foot height; rather, it contemplates by-right development at a 6.0 FAR and 90 foot height. Some goals of the plan agree with what is contained in the Mid-City Area Element and are in line with the development proposed by this study, except one as depicted below: to reconnect W Street NW to the center of Howard University's campus[14].

Source: Duke Plan

Other goals of the Duke Plan include:

- Include neighborhood-serving convenience retail and service uses (e.g., supermarket and drugstore) on the ground floors along Georgia Avenue and V Street.
- Provide parking by below-grade or structured that is sized to meet shared on-site and nearby destination uses.
- Incorporate existing Howard University property at the northwest corner of V Street and Georgia Avenue into Howard Town Center for possible uses as a grocery store and other retail uses.
- Vary heights to avoid a continuous 90 foot roof line[14].

The 2006 D.C. Comprehensive Plan was certainly created with development at the Howard Town Center site in mind with the types of uses as contemplated by the RFP. Thus, as the planned development as proposed by this study meets the standards set forth by the RFP, it is clearly in compliance with the goals of the Comprehensive Plan.

MARKET DEMAND OVERVIEW AND ANALYSIS

As mentioned in the Executive Summary, Howard University issued an RFP to solicit offers for the subject site. Howard does not intend to sell the parcel but to ground lease it. As landlord and as part of the competition, Howard is requiring certain development criteria be included in any offer. Therefore, in evaluating the subject parcel, this study will determine whether there is demand in the market for those criteria and to determine the amount of a ground lease payment that should be offered to Howard to be competitive and to generate sufficient return to a developer. The primary development constraints that Howard made part of the RFP are as follows:

- A minimum total of 500,000 square feet of gross leasable area, 70,000 square feet of which is retail (including a minimum 35,000 square foot grocery store), and over 300 market rate rental apartments.
- The residential component of the Project must offer attractive aesthetics and high-quality amenities.
- The community-serving retail uses must be designed to expand the variety and upgrade the quality of existing retail services in the area.
- The parking facility must be designed to serve the Project's residential, retail and office components, as well as unrelated parking needs of Howard and the surrounding neighborhood. Respondents are encouraged to recommend an appropriate number of parking spaces upon review and assessment of the design plan, utilizing shared parking approaches to minimize the number of spaces needed.
- If included, any office space and related public areas must be designed and finished in a manner that provides for a Class A fit-out by individual tenants[1].

Although office development was not excluded by the RFP, it is clear it is not Howard's preference and would be very difficult to include on the site while still fitting in the other requirements. It is because of this and the fact there is very limited office use in the submarket that demand for the commercial office market was not evaluated in this study. That leaves this study to focus on determining the demand generated by the previously-defined trade market for rental apartments and grocery and retail space.

Residential Demand Analysis

Demand for rental apartments will be the first sector evaluated. Residential demand is typically generated by two drivers: population growth, which is self-explanatory, and churn. Churn includes the number of people within a trade market that move to a new residence in the same market. However, to get a truly accurate picture of the number of people that may demand rental apartments at the subject parcel, another pool of consumers must also be included: Howard University students.

Demand from Population Growth

To measure population growth, census-tract level data from the 2000 U.S. Census was used to derive that year's population in the primary and secondary trade markets. For the primary trade market, the population in 2000 was 64,981 with 27,997 households. For the secondary trade market, the number was 94,975 people and 41,516 households (detailed breakdown by census tract is contained in the Appendix). To project what the population and households of the trade market area would be mid-2011 (the assumed completion date as provided in the Development Schedule section) it was necessary to extrapolate the growth rate for Washington, D.C. as a whole from 2000 until 2007 and then apply that rate to the trade market area. As provided in a previous section, the U.S. Census Bureau estimated the 2007 population of

Washington as 588,292[3]. Comparing this number to 2000, an annual growth rate of 0.41% (or 5.34% for 2000-2012) was derived and applied to each individual census tract. This calculation was carried through 2012 so that the growth could be measured from 2008, which was designated as the baseline. Since the Census does not provide estimates for households, a proportion of households to population number was determined for each census tract and then applied to the newly-estimated population number. The results of this process for the primary and secondary trade markets are summarized below:

	2000	2008 Estimate	2012 Estimate	Growth (2008-2012)
Population – Primary	64,981	67,101	68,450	1,349
Population – Secondary	94,975	98,074	102,958	4,884
Households – Primary	27,997		29,492	
Households – Secondary	41,516		45,589	
Population – Total Trade Market	159,956	165,175	171,408	6,234
Households – Total Trade Market	69,513		75,081	

Next, it is important to understand how many of those 6,234 people that are projected to move into the site's primary and secondary trade markets between 2008 and 2012 would demand the project's housing type: rental apartments. For example, of these new residents, a certain number will want to buy rather than rent, so the first step is to exclude those consumers from the analysis. This was achieved by examining the housing profile of the primary and secondary trade markets from 2000 and extrapolating rental preferences:

Market	Occupied Units	Owner-Occupied Units	Rental Units	Rental Apt Units	Percent Rental
Primary	28,007	8,057	19,950	14,683	71.2%
Secondary	43,158	16,544	26,614	15,019	61.7%
Citywide	248,338	101,216	160,381	125,308	64.6%

Source: D.C. Office of Planning

Of those that preferred to rent, the analysis also must leave out those consumers that would demand a different housing type besides apartments; e.g. single-family detached or rowhouse.

The D.C. Office of Planning provided ward-level data of both renters and owners. Since the boundaries of the primary trade market is Ward 1 that data does not need to be adjusted; however, the secondary trade market overlaps many wards, so the data had to be weighted by population to produce an estimate:

Market	Proportion of Trade Area	1-unit Detached	1-unit Attached	Apt (2 unit and above)
Ward 1 (Prim.)	100%	2.5%	23.9%	73.6%
Ward 2 (Sec.)	37.9%	3.0%	15.5%	81.5%
Ward 3 (Sec.)	3.4%	26.7%	10.6%	62.7%
Ward 4 (Sec.)	31.0%	29.4%	35.6%	35.0%
Ward 5 (Sec.)	27.6%	17.8%	36.9%	45.3%
Weighted Ave. (Sec.)		16.1%	27.5%	56.4%

Source: D.C. Office of Planning

The last piece of required information to translate population growth into apartments demanded is household size. For the year 2000, household size was 2.17 for the primary trade market and 2.12 for the secondary trade market (again using a proportional average of the wards where the census tracts are located)[8]. The analysis concluded that applying the ratios above to the projected population growth from 2008 to 2012 yielded a demand of 326 rental units in the primary market and 802 units in the secondary market for a total of 1,128 apartments.

Market	Growth	New Pop. Demanding Apts	New Growth Demanding Rental Apts	New Rental Apt Units Demanded Accounting for HH Size
Primary	1,349	993	707	326
Secondary	4,884	2,757	1,700	802
Total	6,234	3,749	2,407	**1,128**

The final step is to determine what percentage of those newly demanded units would be captured by the Howard Town Center project. This is established by calculating what proportion the subject development is of the comparable pipeline that is expected to deliver at the same time. In the District as a whole, the 36-month pipeline is 7,126 units[4]. In the submarket, there are five major comparable developments planned to be completed at roughly the same time as Howard Town Center, delivering almost 1,500 units[15].

Source: Cushman & Wakefield

As the Howard Town Center project as proposed will add another 425 apartments, and assuming the product will be comparable to its competition, the capture rate of the new demand would be proportional to the total amount and thus equal 22.3%. Referring back to the earlier definition of a secondary market, it is safe to assume the capture rate will be of 25% of the primary market's capture rate. This would imply that the project would capture 5.6% of new demand in the secondary market. Therefore, applying these rates in the primary and secondary markets to the total number of newly-demanded units suggests the site could support 118 apartments:

Market	Pipeline Inventory	New Demand	Capture of New Demand (per.)	Capture of New Demand (units)	Total
Primary	1,904	326	22.3%	73	
Secondary		802	5.6%	45	**118 units**

Demand from Churn

If the influx of new residents was the only generator, it would be safe to conclude there was not enough demand to satisfy the RFP's goals of over 300 units. However, another demand driver must be evaluated: churn. As noted earlier, churn occurs when existing residents of a market move to another location within the same market. This can be measured by examining the tenure of D.C. residents. As of 2000, the D.C. Office of Planning determined the median year a householder, both owner-occupied and renter-occupied, moved into their unit was 1995 which equates to a median tenure of 5 years[8]. This means the churn rate was 20%, so every year 20% of D.C. residents moved. Applying this churn rate to the estimated number of households in the primary and secondary trade markets in 2012, then isolating only those residents that prefer the rental apartment housing type (using the same statistics as before), and then applying the median D.C. household size yielded churn-generated demand over the 2008-2012 period for the primary trade area of 5,702 and for the secondary market of 5,973.

Market	Occupied Housing Units 2012 (est.)	Churn Unit Demand Per Year	Market Capture of Churn Demand*	Churn Demand for Rental Apt Units	Churn Demand for Years 2008-2012	Rental Apts Demanded Accounting for HH Size
Primary	29,502		5,900	3,093	12,374	5,702
Secondary	45,462		9,092	3,164	12,657	5,973
Citywide	261,597	52,319				
TOTAL			14,993	6,258	25,031	**11,675**

** based on ratio of market-occupied units to citywide*

The assumed capture rate was again a proportion, but this time a proportion of the existing rental apartment inventory, not just units in the pipeline. For the primary market the rate was 2.8% and for the secondary area the rate was 1.4%. This resulted in 245 units of churn-generated demand for Howard Town Center.

Market	Market Inventory	Churn Demand	Capture of Churn Demand (per.)	Capture of Churn Demand (units)	Total
Primary	19,950	5,702	2.8%	160	
Secondary	26,614	5,973	1.4%	84	**245 units**

Demand from Howard University

The last critical market segment to analyze to understand demand drivers for rental apartments is generated from Howard University. As mentioned before, there are a total of 10,586 students enrolled at Howard for the 2008 academic year, and that of these students, 7,112 are undergraduates and the remaining 3,474 are graduates and professionals[10]. This distinction is important because most undergraduates live in campus housing; of those that do not, their younger age makes them less likely to be able to afford apartments at the price point suggested by the rental comparables study presented earlier. Granted, while there may be some undergraduates that might be consumers of apartments at Howard Town Center, this study took a conservative approach and excluded this segment from the market study.

Of the graduate and professional students, only 389, or 11% live in campus housing, meaning 3,085 students do not. This population will most certainly add to the market demand for rental apartments at Howard Town Center for many reasons. First, graduate and professional students tend to have more academic demands than undergraduates and thus need greater access to campus facilities. Considering that the site is across the street from the hospital and Howard's main campus, it offers a tremendous locational advantage to graduate and medical students. (One important factor to note is the Howard University Law School is located in Van Ness, about five miles from the main campus. It is for this reason the law school's 450 students were not included from the analysis of Howard's contribution to demand.) Other important elements of this market segment are that in general more students are renters than owners because of the short-term nature of their residence. Also they will most likely have a smaller household size than is the D.C. median. Therefore, based on these considerations, this study assumed 80% of Howard students will demand rental apartments. The study further assumed the site's capture rate will be 3.0%; this rate accounted for the fact a high price point may drive many students, who are also concerned about paying tuition without a steady paycheck, to look elsewhere for housing. The outcome of this analysis, summarized below, is Howard students will support 63 units.

Student Population	Grad and Prof. Students	Not living on-campus	Less Law Students	Renter and HH Size Factor	Demand	Capture Rate	Capture of Demand
10,586	3,474	3,085	2,635	80%	2,108	3.0%	**63 units**

Total Residential Demand

Totaling the three market demand drivers identified by the analysis, population growth, churn and Howard graduate and professional students, resulted in quantified demand for 425 rental apartment units at Howard Town Center.

New Population Growth	Churn	Howard Univ. Students	Total
118 units	245 units	63 units	**425 units**

Retail Demand Analysis

Trade Market Purchasing Power

The main driver of retail demand is household buying power; therefore, is it important to determine the number of households in the primary and secondary trade markets, the median income of those households, and then to apply that buying power to various categories of household expenditures to quantify the retail square footage that can be supported. Using census-tract level data provided by the D.C. Office of Planning, this study established that in the year 2000, there were 27,997 households in the primary market and 41,516 in the secondary area, for a total of 69,513[8]. These numbers then have to be forecasted to 2012, the first full year after the Howard Town Center is projected to be complete. This was accomplished by using the estimated 2012 population of each census tract presented earlier, and applying the 2000 ratio of household to population to 2012. For example, in 2000 census tract 27.01 had 2,656 households and a population of 5,742, equaling a ration of 0.46. Thus, to get the estimated households for 2012 in the tract, this study applied the same 0.46 ratio to the estimated 2012 population of 6,049 to get 2,798 households. Utilizing this calculation for all census tracts in the trade market produced 29,492 households in the primary market and 45,589 households in the secondary market for a total of 75,080 households in 2012. The full analysis is provided in the Appendix.

A similar analysis was performed to estimate the median household income for the trade market in 2012. In 1999, Washington, D.C.'s median 4-person household income was $40,127 and in 2007 it was $54,127; this difference results in an annual growth level of 4.42%[3]. The D.C. Office of Planning provided census-tract level median household income for the year 2000; it was then possible to estimate the 2012 incomes by applying the city-wide annual growth rate from 2000-2012 to each tract. This method was actually somewhat conservative because it only used incomes for the trade market's population as of 2000 and it did not account for organic increases in median household income that may have resulted from people of higher incomes moving into the trade market. While this factor can be accounted for by understanding demographic shifts that have taken place in the submarket, since it cannot be quantified until the next census in 2010, this study did not attempt to introduce it into the market analysis. The outcome of the analysis suggested that the average household median income in the year 2012 for the primary market will be $55,272 and $67,199 for the secondary market. Multiplying by the estimated number of households in 2012 in those markets yielded a total buying power of $$1,726,121,983 for the primary market and $3,083,797,298 for the secondary market. The full analysis is contained in the Appendix.

Demand for Grocery and Retail Stores

The next step was to understand how this buying power was likely to be used to then isolate the amount that would be spent on grocery and retail stores. The Bureau of Labor Statistics (BLS) provided data to estimate how the average household spends its income. These outlays are divided into numerous detailed categories but for the purposes of this study, only the general categories were used, including: Housing, Food at Home, Food Away from Home, Alcoholic Beverages, Apparel and Services, and Entertainment[6]. The Food at Home category was considered to be money spent at grocery stores; the study assumed that the remaining categories besides Housing covered general retail spending. Alcoholic Beverages were excluded from this assumption because it was deemed not to meet the preferences established by the RFP. The table below shows BLS-provided spending patterns as a proportion of total income in these categories for U.S. and Washington, D.C. for the years 2004-2005 and the resulting 2012 buying power in the primary and secondary trade markets:

Spending Category	U.S.	D.C.	Primary Market	Secondary Market	Total Market
Total Expenditures	100%	100%	$1,726,121,983	3,083,797,298	$4,809,919,281
Housing	32.5%	38.4%	$662,830,842	$1,184,178,162	$1,847,009,004
Food at Home (Grocery)	7.4%	5.5%	$94,204,810	$168,301,280	$262,506,090
Food Away from Home	5.6%	5.0%	$85,601,490	$152,931,048	$238,532,539
Apparel and Services	4.1%	4.0%	$69,044,879	$123,351,892	$192,396,771
Entertainment	5.1%	4.7%	$81,127,733	$144,938,473	$226,066,206
Retail Total	14.8%	13.7%	$235,774,103	$421,221,413	$656,995,516

Source: Bureau of Labor Statistics

The final step was to use the categorized spending power for the trade markets and translate those data into supportable grocery and retail square footage. This was accomplished by determining the site's capture rate and then applying the required sales per square foot rate, which is an industry-wide profitability ratio. Capture was determined by existing supply deemed to be comparable. Existing and planned grocery stores are noted below:

Store	Address	Size	Year Built	Comment
Giant	1414 8th St. NW	71,000	2011	Part of planned redevelopment of O St Market
Whole Foods	1440 P St. NW	42,000	2000	Specialty shopper
Safeway	1701 Corcoran St NW			old, small store, not full-service, no parking - NOT COMPARABLE
Giant	1345 Park Rd. NW	53,000	2005	brand new, ample free parking on 2nd level, across from Metro station
Safeway	1747 Columbia Rd. NW			old store, limited parking - NOT COMPARABLE
Safeway	514 Rhode Island Ave. NE	55,000		
Safeway	1800 20th St. NW			old, small store, not full-service, no parking - NOT COMPARABLE
Safeway	5th and K St. NW	55,000	2008	Part of new City Vista
Safeway	3830 Georgia Ave. NW	53,000		Old store but on same rd as subject
Harris Teeter	1631 Kalorama Rd NW	40,000	2008	brand new, ample free parking 1st floor (store on 2nd floor)
Giant	1050 Brentwood Ave. NE	54,000	2002	

Source: Washington, D.C. Economic Partnership

The total competition within 1.0 mile is 166,000 square feet and within 2.0 miles is 257,000 square feet. Assuming that the subject grocery store will be 54,600 square feet, this means that of the primary market, the Howard Town Center store will be 24.8% of it. Of the secondary market, the store's square footage will be 17.6% of supply; however, this should be adjusted by a factor of 50% to account for the fact customers from the secondary market would be less willing to travel the extra distance to shop at the store. Blending the primary rate of 24.8% with the secondary rate of 8.8% resulted in a capture rate of 16.8%.

This rate was applied to the overall market buying power to determine what percentage of spending will be captured by the subject grocery store, but before this calculation, one more market segment must be added: inflow spending. Inflow accounted for those consumers that live outside of the market area who are likely to patronize the grocery store. Of particular interest is the Howard University Hospital, which as it was mentioned before has 479 beds with the accompanying patient visits and approximately 2,500 physicians, nurses and other staff that work at the hospital[11]. Other inflow variables include vehicular traffic and pedestrians utilizing the nearby Metro stations, as provided below:

Inflow Component	Amount
Traffic Count of 7th Street NW/Georgia Ave NW:	10,400
Traffic Count on Florida Avenue NW:	27,500
Average Weekday Count Howard/Shaw Metro Station:	7,544
Average Weekend Count Howard/Shaw Metro Station:	7,628
Average Weekday Count U Street Metro Station:	10,924
Average Weekend Count U Street Metro Station:	14,165

Source: Washington, D.C. Economic Partnership

An inflow factor of 10% will be added to the market's spending power[16], yielding a figure for the Food at Home category (i.e. grocery store) of $288,756,699. The Howard Town Center grocery store can expect to capture 16.8% of that spending, or $48,383,946. To translate this to supportable square feet, the industry-wide figure for required sales-per-square-foot of $500.00 was employed[16]. The resulting demand for 96,768 square feet shows that there is more than enough demand to support a new 54,600 square foot grocery store in this market. A metric that further illustrates this disparity of demand for grocery stores to supply is that the U.S. average is 8,900 people for one store, but in D.C. there are 19,300 people for one store[4].

Food at Home Market Buying Power:	$262,506,090
Add Inflow:	10%
Total Grocery Store Spending:	$288,756,699
Blended Primary/Secondary Capture Rate:	16.8%
Site Capture of Market Spending:	$48,383,946
Required Sales Per Square Foot:	$500.00
Supportable Grocery Square Footage:	96,768

The same analysis is performed to determine the supportable square footage for retail. Repeating the previous data, the market spending for those BLS categories that make up Howard

Town Center's target retail is $656,995,516. Again, a 10% inflow factor was added to this amount resulting in a total primary and secondary trade market buying power of $722,695,068. The RFP stated that Howard prefers community-serving retail; this study assumed that would include restaurants, dry cleaners, banks, book stores, clothing stores, etc. In order to determine the site's capture rate, it was necessary to understand what its competition would be. A large shopping center in Columbia Heights called "DC USA," includes national chain and big-box retailers such as: Target, Best Buy, Marshalls and Staples. This regional shopping center was not considered a competitor to Howard Town Center because it has a different type of retailer and draws many consumers from outside of the subject site's market area. While it was difficult to quantify the existing retail supply in the submarket like was performed for grocery store competition, one important metric to understanding the District's overall retail demand and supply dynamic is whereas the national average is 20.0 square feet of retail per capita, in D.C. that number is only 7.8[4]. As a conservative estimate, a 1% capture rate was assumed for the Howard Town Center site. This implied that of the buying power calculated, the site's retailers can expect to capture $7,226,951. The required sales-per-square-foot factor for retail is lower than grocery stores, at $350.00[16]. This makes sense because it is more costly to operate a grocery store so more revenue is required to remain profitable. Applying that factor yields 20,648 square feet of supportable retail at the Howard Town Center site, as summarized below:

Retail Store Spending:	$656,995,516
Add Inflow:	10.0%
Total Retail Store Spending:	$722,695,068
Site Capture:	1.0%
Capture of Spending:	$7,226,951
Required Sales per SF:	$350.00
Supportable SF:	20,648

To review, the Howard Town Center project can support 425 apartments, 96,768 square foot of grocery store, and 20,648 square feet of retail. However, no comparable grocery stores in the market are that large, averaging almost 53,000 square feet. Additionally, because of the lot occupancy restrictions discussed in the Zoning Overview section combined with the need to properly fit 425 apartments in seven stories suggested that the building's footprint be 70,000 square feet. This would limit the retail use to seven bays of 2,200 square feet (a size similar to other retail in the market) and a grocery store of 54,600 square feet. This program meets the zoning restrictions and thus the development is allowed by-right.

CATEGORY	PERMITTED	PROPOSED
Lot Size:	97,679 sf	97,679 sf
Footprint:	73,259 sf	70,000 sf
Permitted Square Footage @ 6.0 FAR (min 3.0 residential):	586,074 sf (at least 293,037 sf residential)	550,027 sf (480,027 sf residential)
Maximum Height:	90 ft	90 ft
Parking Spaces (Retail):	70,000 sf retail – 3,000 sf = 67,000/750 = 89.333	90 spots
Parking Spaces (Residential):	425 units/3 = 141.667	142 spots

DEVELOPMENT SCHEDULE AND SITE PLAN

Development Schedule

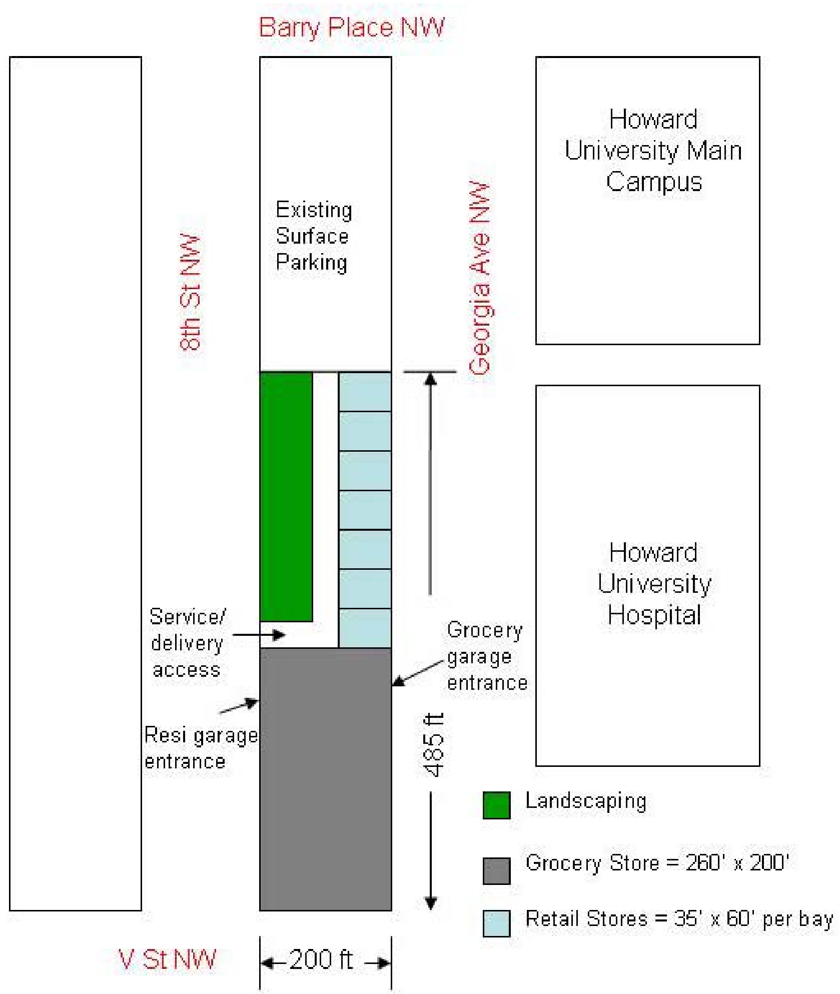
The RFP was issued by Howard University on May 6, 2008. The timeline set forth in the RFP indicates that a developer will be selected by August 5th, a Developer's Agreement will be signed with Howard by September 19th and then a Ground Lease will be negotiated and signed within 60 days after that date, or November 19th[1]. Including design and construction, the following schedule estimates that construction would be complete in July 2011:

Ground Lease	
RFP Issued:	5/6/08
RFP Responses Due:	6/10/08
Howard Reviews Responses:	7/8/08
Oral Presentations:	7/15/08
Best and Final Offers Due:	7/29/08
Developer Selection:	8/5/08
Complete Due Diligence:	8/5/08 – 11/19/08
Sign Developer's Agreement:	9/19/08
Execute Ground Lease:	11/19/08
Financing	
Initiate Discussions with Banks:	8/5/08 – 9/19/08
Discuss Acceptable Ground Lease Terms:	9/19/08 – 11/18/08
Discuss Financing Terms:	9/19/08 – 11/18/08
Close on Project Financing:	11/19/08
Project Design	
Select A/E Firm:	9/19/08 – 11/19/08
Hire A/E:	11/20/08
Develop Program/Schematic Design:	11/21/08 – 2/15/09
Develop Design Documents:	2/15/09 – 5/15/09
Develop Permit Documents:	5/16/09 – 7/15/09
Obtain Building Permits:	7/16/09 – 11/15/09

Project Construction	
Develop Construction Documents:	7/16/09 – 8/15/09
General Contractor Bidding:	8/16/09 – 10/15/09
Hire General Contractor:	10/15/09
General Contractor Mobilization:	10/16/09 – 11/15/09
Construction:	11/16/09 – 7/15/11

Site Plan

The site's dimensions are approximately 200 feet along V Street, NW by 485 feet along Georgia Avenue, NW. Assuming that the seven retail bays are 31' by 71' and the grocery store is 270' by 200', the following plan depicts the flow within site.



As Georgia Avenue, NW is the main commercial artery and directly across from the Howard University Hospital and the university's main campus, the retail and grocery uses will desire frontage along that street. Access to the service alley is provided by 8th Street, NW. The garage is located underneath the grocery store and provides spaces for the grocery store on the 1st floor and the apartments on the 2nd and 3rd floors. The entrances to each component are separate, with the residential garage entrance on 8th Street, NW and the grocery store garage entrance on Georgia Avenue, NW. Since the spaces for the grocery store will be free, this will prevent those shoppers from parking in the spaces set aside for the apartments and allow for segregation of the parking to their appropriate uses. The landscaping shown on the site plan will provide green space for the residences and permit the development to abide by the lot occupancy restrictions. Between the landscaping and the service alley, approximately 68% of the lot is occupied, which complies with the 75% requirement. A condominium project on Capitol Hill provides an example of an urban site with grocery and retail uses on the 1st floor with apartments above:


Grocery Store
Apartments over Grocery Use
HarrisTeeter
Food Market And Pharmacy
JENKINS ROW

FINANCIAL ANALYSIS OVERVIEW

Project Development Costs

After conducting the market analysis to determine how large the development will be, the next step was to perform financial analysis to understand if the development can provide an acceptable return to the developer. To understand profit potential, the first component is to determine how much it will cost to build; therefore, a development budget must be completed. At this stage a rough budget is sufficient, using generally accepted costs per square foot of different items, as is shown below:

Component	Factor	Unit	Cost/Unit	Total Cost
Demolition:	195,358	exist square ft	$5.00	$976,790
Residential Construction:	480,027	resi square ft	$190.00	$91,205,066
Below Grade Parking:	232	space	$45,000	$10,440,000
Retail Construction:	70,000	tot ret square ft	$125.00	$8,339,250
Grocery Tenant Improvements:	54,600	groc square ft	$50.00	$2,730,000
Retail Tenant Improvements:	15,400	ret square ft	$20.00	$308,000
Architect/Engineer Services:	550,027	bldg square ft	$6.00	$3,300,160
Other Consultants:	550,027	bldg square ft	$3.00	$1,650,080
Land Value:	550,027	bldg square ft	$100.00	$55,002,666
Developer Fee:	$120,102,632	hard/soft costs	4.0%	$4,804,105
Other Costs (permits, utility fees, insurance, etc):	550,027		$0.50	$275,013
Property Tax During Construction:	$53,371,463	land value/100	$0.85	$467,523
Construction Period Interest Carry:				$9,992,539
Construction Loan Point:			1.0%	$1,244,392
TOTAL DEVELOPMENT COST			**$347.52**	**$191,146,334**

The residential construction was assumed to be for a concrete structure, the grocery store construction was assumed to be for a cold, dark shell, and the retail construction was assumed to be for a vanilla shell. It is important to note a typical line item, acquisition costs, is not included in the budget. Instead it is referred to as “Land Value.” This is because in the RFP Howard requested that monetary consideration be offered in the form of annual payments through a ground lease. Thus, this cost is not borne up front, but instead will be paid on an annual basis separate from the mortgage. So in this sense, while it is not a “cost,” it should still be included in total development costs to understand what the true cost of the project would be. This amount totals $191,146,334 or $347.52 per square foot.

Income

Residential Income

After calculating what the construction costs would be, projecting future income becomes necessary to evaluate the project’s success. For this development, income is derived from rent, which is derived from what the market is willing to pay. For the residential component, a comparable market study was performed with the help of a local broker to see what the price points and sizes are for other successful products in the submarket[15]. While the full study is contained in the Appendix, a summary of the six properties is presented here:

	Studio/Jr 1BR	1 BR	2 BR	3 BR	All
Ave. Rent/SF/Month	$3.31	$3.08	$2.90	$3.26	$3.05
Ave. Size (SF)	521	850	1104	1596	931

Additionally, the average parking fee charged per month in all of the comparable buildings was $217. Since the average rent and parking rates were for 2008, they were then inflated at 2.5% per year for two years to estimate what they would be in 2011. These income data, which were then also inflated 2.5% per year to account for the projected increase in the Consumer Price Index (CPI), were inserted into a rent roll to provide a 10-year projection of income derived from the apartments and parking spaces. The rent roll provides a breakdown of the number and size of each unit type that is proposed for the apartment building. This unit mix was produced to try to appeal to different living arrangements that were likely in the general targeted market of young professionals and Howard University students. To achieve this, a mix of unit types was warranted, although not many 3-bedroom units were included because this size is uncommon in the D.C. apartment market. Also, the size of each unit type was determined based on what was offered at comparable buildings in the market. The proposed unit mix, base year price point (2011) and size is shown below:

Unit Mix	Per. of Bldg	# of Units	Size (sf)	Base Rent/sf	Unit Rent	Base Annual Rent
Studio/ JR 1BR	20.0%	85	560	$3.48	$1,946.28	$1,985,205.60
1BR	30.0%	128	892	$3.23	$2,884.73	$4,413,633.84
2BR	45.0%	191	1,146	$3.05	$3,489.57	$8,008,563.15
3BR	5.0%	21	1,652	$3.42	$5,6540.80	$1,441,972.98
Total Building	100.0%	425	415,608		$13,975	**$15,849,376**
Average Unit			978	$3.18	$3,108	

Based on this unit mix and price points, the gross income derived from the apartments and parking over the 10-year hold period is shown below:

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Residential										
TOTAL RESIDENTIAL RENT	$15,849,376	$16,425,610	$16,651,750	$17,068,044	$17,494,745	$17,932,114	$18,380,417	$18,839,927	$19,310,925	$19,793,698
Parking										
Base Monthly Residential Parking Income	$227.85	$233.55	$239.38	$245.37	$251.50	$257.79	$264.24	$270.84	$277.61	$284.55
Base Retail Parking Income	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Residential Parking (142 spots)	$388,256	$397,963	$407,912	$418,110	$428,562	$439,276	$450,258	$461,515	$473,053	$484,879
Retail Parking (90 spots)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
TOTAL PARKING INCOME	$388,256	$397,963	$407,912	$418,110	$428,562	$439,276	$450,258	$461,515	$473,053	$484,879

The residential income then had to be adjusted to account for the fact that units will be absorbed over a period of time. This loss of income, or absorption loss, needed to be subtracted from the income projection until the project reaches stabilization. The financial model used the

Washington regional average rate of 17 units a month, meaning it would take 25 months for the building to reach full occupancy[4]. Using the above average unit rent of $3,108 per month yields absorption loss that equaled $11,728,538 in 2011 and $4,120,838 in 2012.

Month	Vacant Apts	Loss	Month	Vacant Apts	Loss
1	408	$1,267,950	13	204	$633,975
2	391	$1,215,119	14	187	$581,144
3	374	$1,162,288	15	170	$528,313
4	357	$1,109,456	16	153	$475,481
5	340	$1,056,625	17	136	$422,650
6	323	$1,003,794	18	119	$369,819
7	306	$950,963	19	102	$316,988
8	289	$898,131	20	85	$264,156
9	272	$845,300	21	68	$211,325
10	255	$792,469	22	51	$158,494
11	238	$739,638	23	34	$105,663
12	221	$686,806	24	17	$52,831
		$11,728,538			**$4,120,838**

Another component of lost income that had to be considered was concessions. Absorption of 17 units per month is on the high end of the average and to achieve that aggressiveness, rental concessions may be necessary. Also, looking at the market study of comparable buildings, some, but not all are providing concessions in the current marketplace. While it may be unnecessary to provide concessions once the building opens, including an assumption for concessions in the financial analysis allowed the model to be more conservative. Assuming that the concession would equal one month’s free rent, this loss was projected to be $633,975 in 2011 and in 2012.

Month	Rented Apts	Loss	Month	Rented Apts	Loss
1	17	$52,831	13	17	$52,831
2	17	$52,831	14	17	$52,831
3	17	$52,831	15	17	$52,831
4	17	$52,831	16	17	$52,831
5	17	$52,831	17	17	$52,831
6	17	$52,831	18	17	$52,831
7	17	$52,831	19	17	$52,831
8	17	$52,831	20	17	$52,831
9	17	$52,831	21	17	$52,831
10	17	$52,831	22	17	$52,831
11	17	$52,831	23	17	$52,831
12	17	$52,831	24	17	$52,831
		$633,975			**$633,975**

Retail and Grocery Income

A similar exercise was conducted to project income generated from the grocery store and retail. For the retail a comparable market study was provided by a local broker showing an average rental rate of $52.69 per square foot, including $20 per square foot in tenant improvements[15]. The grocery store rate was derived from an average of $30.00 per square foot in Northern Virginia plus a slight premium for being located in Washington[4]. The grocery also includes $50 per square foot for tenant improvements[15]. Again both the grocery and retail rental rates were inflated for two years to project to 2011. These data are summarized by the table below:

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Grocery Base Rent	$36.75	$37.67	$38.61	$39.58	$40.57	$41.58	$52.62	$43.68	$44.78	45.90
Total Grocery Rent	**$2,006,550**	**$2,056,714**	**$2,108,132**	**$2,160,835**	**$2,214,856**	**$2,270,227**	**$2,326,983**	**$2,385,157**	**$2,444,786**	**$2,505,906**
Retail Base Rent	$55.32	$56.71	$58.13	$59.58	$61.07	$62.59	$64.16	$65.76	$67.41	$69.09
Retail #1	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Retail #2	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Retail #3	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Retail #4	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Retail #5	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Retail #6	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Retail #7	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Total Retail Rent	**$851,997**	**$873,297**	**$895,130**	**$917,508**	**$940,446**	**$963,957**	**$988,056**	**$1,012,757**	**$1,038,076**	**$1,064,028**

Ground Lease Payment

At this point the acquisition costs that were excluded from the development budget come into play. The annual lease payments can be calculated by using land value derived by assuming a market rate per FAR foot. The market rate was used because it was assumed that to be successful, a developer would have to make a competitive offer to Howard. According to a local developer familiar with the submarket, a value of $100 per FAR square foot would be competitive and so was used by this study to derive land value[2]. As the proposed development is 550,027 square feet, this results in a land value of $55,002,666. Of course, if a developer desires to offer a land value higher than market and take a lower IRR, the RFP response would be more competitive. Once a land value was derived, annual lease payments were calculated; the ground lease discount rate and the lease term were necessary components to determining this value. Accepting the requirement of the RFP, that the ground lease payments would be senior to the debt service, meant the lease would be paid to Howard before the mortgage was serviced.

Because it gets paid first, this arrangement theoretically makes the lease payment less risky from Howard's perspective than the mortgage is to the bank. Therefore, Howard's discount rate should be lower than the bank's interest rate, which is its measurement of risk. Since the mortgage interest rate being used in the overall financial analysis was 6.5%, Howard's discount rate was 6.0%. A bank would likely accept its second position to the lease payment as long as there was language in the ground lease providing it with the right to "step into" the developer's place in the case of a default on the lease. The other variable was the length of the lease term. There was no guidance in the RFP about Howard preference for the lease term. This study would recommend a term most advantageous to a developer; this would be a term as long as legally permissible and still be considered a long-term lease: 99 years. Applying all of these variables to the land value yielded annual lease payments of $3,310,502. The ground lease components are summarized in the table below:

Land Value:	$55,002,666
Lease Term:	99 years
Ground Lease Discount Rate:	6.00%
Annual Lease Payment:	$3,310,502

Net Operating Income

The final step of the financial analysis was to plug the income projections into the discounted cash flow model, add in assumptions for operating expenses, replacement reserve, ground lease payments and debt service and determine what the IRR would be. Besides accounting for absorption and concession losses as described previously, other drains on the gross potential income of the project are vacancy and collection loss. The current retail vacancy rate in Washington, D.C. is 9.2%[17]. After accounting for higher vacancies due to lease-up in 2011 and 2012, the financial model assumed a 10% rate for the retail stores only. It was assumed the grocery store would sign a long-term lease and so vacancy loss was not included for the grocery store income. The vacancy rate used throughout the model for the residential component was 5.0%; including a loss due to lease-up like the retail was unnecessary as the absorption loss already accounted for that. Although the current vacancy rate for residential product in the District is only 3.7%, which is 3rd lowest in the U.S., it is expected that the excessive supply coming online in the next 36 months will put pressure on vacancy resulting in a rate projected to be 5.3% by 2010[4].

Considering the competitive apartment buildings in the submarket have extensive amenities, operating expenses were assumed to be somewhat high at 27.0% of residential income, which equated to roughly $10,000 per unit per year. This assumption was necessary because the comparable study showed that competing apartments in this submarket offered numerous high-cost amenities like fitness rooms, rooftop terraces and business centers. Since the operating expenses were a percentage of income, which is escalated at CPI, they would automatically increase at the same rate. The operating expenses line item was assumed to include things like insurance, management fee, common area utilities, repairs and maintenance, security, etc. The operating expenses only included utilities for the common areas, not the units – the comparable study indicated that newer products had individual meters to allow tenants to pay all utility expenses. Similarly, the retail leases were assumed to be triple net, so no retail operating expenses were included in the model.

Property taxes in the District are assessed at a rate of $0.85 per $100 of value for residential property and $1.85 per $100 of value for commercial and industrial property. Using the hard cost for the residential and retail components and assuming a split of the parking cost resulted in a base year property tax of $1,122,561; this amount was also escalated at CPI.

After projecting the income and expenses for the project, it was possible to determine its net operating income (NOI). While the first two years before stabilization the property produced a positive NOI, it was not until the stabilized year of 2013 when the NOI of $12,891,030 would be sufficient to cover the debt service, the derivation of which will be discussed in the next section. The full discounted cash flow model is included in the Appendix.

Mortgage

To determine the maximum loan amount, a bank assesses risk by measuring a project's ability to service the loan by projecting the amount of cash it will produce, and thus how much money will be available to pay the mortgage. The calculation of the loan amount using the two measures of the project's ability to pay, loan-to-value (LTV) on the left side of table and debt service coverage ratio (DSCR) on the right side of table are shown below:

Stabilized NOI (Yr 3):	$12,891,030	Stabilized CF After Lease Before Debt:	$9,446,573
Cap Rate:	5.5%	Minimum DSCR:	1.20
Implied Value:	$234,382,368	Rate:	6.5%
LTV:	75%	Amortization:	30 Years
		Implied Annual Payment:	$7,872,144
Maximum Loan:	$175,786,776	Maximum Loan:	**$103,788,202**

Using the LTV calculation to determine maximum loan amount required an estimation of the project's value. The cap rate of 5.5% is typical for Class A apartment product in the Washington, D.C. market according to a local developer. Therefore the implied value of the project at stabilization in 2013 was $234,382,368. Market surveys indicated that 75% LTV is standard in today's market[18]; the resulting maximum loan amount was then $175,786,776.

The DSCR calculation also required a projection of the project's future income stream but instead of using NOI, the analysis used the stabilized cash flow after payment of the ground lease but before payment of the mortgage, since the ground lease is senior to the mortgage debt.

In this case, that amount was estimated to be $9,446,573. In order for the bank to have a cushion in case the project experiences an unexpected reduction to its cash flow, it would require this amount to be 120% of what the annual debt service would be. Using the terms laid out in the section above, this made the maximum loan amount $103,788,202. Since this amount was lower than using the LTV calculation, it was the maximum loan amount. The total development cost of the project excluding the land value – since this would be paid as an annual lease payment out of project cash flow it would not have to be financed – was projected to be $136,143,668. The difference between this amount and the maximum loan will be the equity required for the project.

Total Development Costs (excl. land value):	$136,143,668
Mortgage:	$103,778,202
Equity:	$32,355,466

As a result of the uncertainty in present-day financial markets, debt is very difficult to price because new deals are being closed so infrequently. However, according to market surveys, the average rate for permanent mortgage debt for residential is 6.36% and for retail it is 6.66%[18]. Blending the two rates and being on the conservative side resulted in a rate of 6.50%. A 30-year amortization was used with a 10-year term. These parameters resulted in a monthly loan payment of $656,012 and an annual payment of $7,872,144.

Mortgage:	$103,788,668
Interest Rate:	6.50%
Amortization:	30 years
Monthly Payment:	$656,012.04
Annual Payment:	$7,872,144.46

Since the maximum loan amount was calculated using a DSCR of 1.20 as a constraint, the stabilized year of 2013 would have a DSCR of 1.20 and it would rise as the cash-flow-after-ground-lease-payment increased while the debt payment itself was fixed.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Lease Payment	$3,310,502	$3,310,502	$3,310,502	$3,310,502	$3,310,502	$3,310,502	$3,310,502	$3,310,502	$3,310,502	$3,310,502
CF After Lease Pm	$208,183	$5,818,706	$9,446,573	$9,765,500	$10,092,400	$10,427,473	$10,770,922	$11,122,958	$11,483,794	$11,853,652
Debt Service	$7,872,144	$7,872,144	$7,872,144	$7,872,144	$7,872,144	$7,872,144	$7,872,144	$7,872,144	$7,872,144	$7,872,144
DSCR	**0.03**	**0.74**	**1.20**	**1.24**	**1.28**	**1.32**	**1.37**	**1.41**	**1.46**	**1.51**
CF After DS	$(7,663,961)	$(2,053,438)	$1,574,429	$1,893,356	$2,220,256	$2,555,328	$2,898,778	$3,250,813	$3,611,650	$3,981,507

Financial Return

Reversion

The projection assumed a hold period of 10 years, or reversion in 2020. The “going-in” cap rate was assumed to be 5.5% which is typical for a Class A product in Washington, D.C. near a Metro station. The reversion cap rate of 6.5% was 100 basis points higher than the going-in cap rate to account for the uncertainty of the market in 2020. The NOI in the reversion year was $15,323,384. Using the cap rate of 6.5% yields a reversion value of $235,744,369. Since this would be month 120 of the mortgage note, the remaining 240 months or $87,987,617 would need to be paid off, along with D.C. deed and transfer taxes and the seller’s commission, leaving net proceeds of $133,847,834 in the reversion year of 2020.

Terminal Net Operating Income	$ 15,323,384
Going-In Cap Rate	5.50%
Terminal Capitalization Rate	6.50%
Anticipated Value in 2020	$ 235,744,369
Mortgage Pay-Off	$ 87,987,369
Deed and Transfer Taxes (1.45% + 1.45)	$ 6,836,587
Seller's Commission (3.0%)	$ 7,072,331
Net Proceeds at Sale	**$133,847,834**

Levered IRR

The yearly cash flow (after payment of ground lease and debt service) plus the presumed sale of the building in 2020 is summarized below (the first number being the equity and initial ground lease deposit contributions). These cash flows resulted in a levered IRR of 15.23% and a net present value of $7,034,614 using a discount rate of 13.0%:

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Net Cash Flow After Debt	$(32,605,466)	$(7,663,961)	$(2,053,438)	$1,574,429	$1,893,356	$2,220,256	$2,555,328	$2,898,778	$3,250,813	$3,611,650	$3,981,507
Sale Proceeds											$133,847,834
Total Cash Flow	$(32,605,466)	$(7,663,961)	$(2,053,438)	$1,574,429	$1,893,356	$2,220,256	$2,555,328	$2,898,778	$3,250,813	$3,611,650	**$137,829,341**

Unlevered IRR

An unlevered IRR evaluates the project without the affect of debt – it assumes that the project is built completely with cash, which thus also included payment of the ground lease. So instead of just an initial equity contribution, it included the total development costs plus the ground lease deposit, and the reversion did not include payoff of the mortgage because there would not be one. The cash flows examined are after payment of the ground lease and resulted in an unlevered IRR of 10.02% and a net present value of $(24,073,265) using a discount rate of 13.0%:

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Net Cash Flow After Lease	$(136,393,668)	$208,183	$5,818,706	$9,446,573	$9,765,500	$10,092,400	$10,427,473	$10,770,922	$11,122,958	$11,483,794	$11,853,652
Sale Proceeds											$221,835,451
Total Cash Flow	$(136,393,668)	$208,183	$5,818,706	$9,446,573	$9,765,500	$10,092,400	$10,427,473	$10,770,922	$11,122,958	$11,483,794	**$233,689,103**

Return on Cost

The return on cost for the project, which measures the NOI in the stabilized year by the total development costs, was 6.74%. In this case, the development costs included the land value because while it would not be financed, it would still be a cost of development.

Sensitivity Analysis

As discussed above, the volatility in the financial markets has meant that very few deals are being completed. Thus, although the surveys can indicate average rates, the survey size may be very small and the parameters may change quickly as the economy goes through its market correction. Therefore, the largest uncertainty (i.e. risk) associated with this project is likely to be how permanent debt will be priced by the time this project is ready to be financed. This risk was tested to determine if the project would still be viable if instead of obtaining a rate at 6.50%, the rate was 50 and 100 basis points higher. Holding all other variables constant except the interest rate illustrated the direct affect of that risk. The sensitivity analysis showed that an increase of 50 basis points on the interest rate to 7.00% resulted in a drop of the IRR from 15.23% to 13.97%. This was because the maximum loan was reduced, which would require more of an equity contribution, while the cash flow returned to that equity would be the exact same. The same cash flow returned to a higher equity contribution yields a lower IRR. An increase of the interest rate to 7.50% further decreased the IRR to 12.98%. Depending on what the developer's required hurdle rate, this risk may be deemed too high to proceed with the project. The effect of the interest rate sensitivity analysis is summarized below:

6.50% Interest Rate		7.00% Interest Rate		7.50% Interest Rate	
Dev Costs:	$136,143,668	Dev Costs:	$136,143,668	Dev Costs:	$136,143,668
Max Loan:	$103,778,202	Max Loan:	$98,603,576	Max Loan:	$93,821,285
Equity:	$32,355,466	Equity:	$37,540,094	Equity:	$42,322,383
Stabilized NOI:	$12,891,030	Stabilized NOI:	$12,891,030	Stabilized NOI:	$12,891,030
Stabilized CF After Lease Payment:	$9,446,573	Stabilized CF After Lease Payment:	$9,446,573	Stabilized CF After Lease Payment:	$9,446,573
Debt Service:	$7,872,144	Debt Service:	$7,872,144	Debt Service:	$7,872,144
Stabilized CF After Debt Service:	$1,574,429	Stabilized CF After Debt Service:	$1,574,429	Stabilized CF After Debt Service:	$$1,574,429
IRR:	**15.23%**	**IRR:**	**13.97%**	**IRR:**	**12.98%**

Another sensitivity analysis tested the development constraints applied to the project by Howard University. In a typical fee simple conveyance, the seller does not determine how the buyer develops the land – theoretically, this is determined by the market. The buyer would conclude what the highest and best use of the land was and develop it to that use. In the Howard Town Center project, the university, not the market, has determined how the land should be developed by requiring certain development uses. Of particular interest to this study was to understand what affect the grocery store and retail uses had on the project's return. Therefore, an analysis was performed to determine whether a higher return would be generated if only a residential use was developed. To test this scenario, several variables had to be adjusted on the cost and income sides, mainly the total development cost, which was reduced to $155,684,403 or $374.59 per square foot, and the rent roll, which now only included income from apartments. Since the development was only residential, the project's square footage was reduced to 480,027 square feet with the corresponding decrease in land value to $48,002,666 and annual ground lease payments to $2,889,186. The overall effect of limiting the project only to residential resulted in an IRR of 14.00%. That this is close to the IRR of the main scenario indicates that the grocery and retail uses would not be a significant drag on the project. A comparison of the major elements of both scenarios is shown below:

Residential and Retail Uses		Residential Use Only	
Dev Costs:	$191,146,334	Dev Costs:	$155,684,403
Square Footage:	550,027	Square Footage:	480,027
Cost per SF:	$347.52	Cost per SF:	$374.59
Land Value:	$55,002,666	Land Value:	$48,002,666
Stabilized NOI:	$12,891,030	Stabilized NOI:	$10,285,118
Debt Service:	$7,872,144	Debt Service:	$6,051,648
Ground Lease Payment:	$3,310,502	Ground Lease Payment:	$2,889,186
IRR:	**15.23%**	**IRR:**	**14.00%**

CONCLUSION

The Howard Town Center RFP provides an excellent opportunity for development in an exciting Washington, D.C. neighborhood. The RFP requires all proposed development to be a minimum of 500,000 square feet of gross leasable area and to include at least 300 market-rate apartments and 70,000 square feet of retail (including a minimum 35,000 square foot grocery store). After performing a market demand analysis, it was determined that these minimum standards would be viable and suggested that the market demand could actually support a development program of 425 apartments, a 54,600 square foot grocery store, and 15,400 square feet of other retail for a total of 550,027 square feet of gross leasable area.

Financial analysis was then conducted to establish the return that could be expected based on development costs, mortgage financing and 10-year income and expense projections. This analysis concluded the levered IRR would be 15.23%. To understand what the uncertainty in the present-day financial markets might mean for the project's return, a sensitivity analysis tested mortgage rates at 50 and 100 basis points higher than average. The results showed that the IRR would be decreased by roughly 100 basis points for every 50 basis points increase in the interest rate. Further tests demonstrated that limiting development to only residential would not have any significant affect on the project's return.

The Howard Town Center RFP Viability Study concluded that to achieve a healthy market return, a developer should bid a market rate of $100 per FAR square foot. Based on the proposed development program, this would equate to an implied land value of $55,002,666, or annual lease payments over 99 years of $3,310,502.

SOURCES

1. Howard University RFP
2. Data from Matt Valentini, JBG
3. U.S. Census
4. TrendLinesReport 2008, Delta Associates
5. George Mason University – Center for Regional Analysis
6. Bureau of Labor Statistics
7. 2006 D.C. Comprehensive Plan
8. D.C. Office of Planning
9. Washington, D.C. Economic Partnership
10. www.howard.edu
11. www.hospital-data.com
12. Market Analysis for Real Estate
13. District of Columbia Municipal Regulations, Title 11: Chapter 6, 21 and 24
14. Duke Plan
15. Data from David Dochter, Cushman & Wakefield
16. Data from Thomas Martens, Economic Research Associates
17. CoStar data included in Washington Post article: http://www.washingtonpost.com/wp-dyn/content/graphic/2008/11/10/GR2008111000117.html?sid=ST2008111000513&s_pos=list
18. www.realtyrates.com

APPENDIX

Census Tract Analysis

Population Forecast* * all data from DC Office of Planning Website unless otherwise noted

Year	DC Overall	Primary	Secondary
2000	572,059	64,981	94,975
2007	588,292	66,562	97,285
Annual Growth Rate	0.41%		
Estimated 2008	590,677	67,101	98,074
Estimated 2012	602,601	68,189	99,664
Growth (2000-2012)	30,542	3,208	4,689
Growth (2000-2012)	5.34%		

AMI for DC (1999)	$ 40,127.00	for 4-person household
AMI for DC (2007)	$ 54,317.00	for 4-person household
Annual Growth Rate	4.42%	
AMI for DC (2012)	$ 63,920.99	
Growth Rate 2000-2012	59.30%	

Census Tract	Ward	Population (2000)	Estimated 2012 Population	Households 2000	Proportion of Household to Population 2000	Estimated Households 2012	Median Family Income 1999	Estimated Median Family Income 2012	Estimated 2012 Tract Buying Power	Occupied Housing Units (2000)	Owner-Occupied Housing Units (2000)
	PRIMARY										
27.01	1	5,742	6,049	2,656	0.46	2,798	$ 35,147	$ 55,988	$ 156,643,365	2,650	585
27.02	1	6,052	6,375	2,549	0.42	2,685	$ 45,428	$ 72,365	$ 194,307,303	2,553	825
28.01	1	3,629	3,823	1,390	0.38	1,464	$ 25,038	$ 39,885	$ 58,399,631	1,400	251
28.02	1	4,700	4,951	1,740	0.37	1,833	$ 22,736	$ 36,218	$ 66,383,322	1,738	151
29.00	1	4,189	4,413	1,403	0.33	1,478	$ 29,602	$ 47,155	$ 69,690,631	1,394	561
30.00	1	2,829	2,980	959	0.34	1,010	$ 25,539	$ 40,683	$ 41,097,761	1,039	245
31.00	1	2,755	2,902	975	0.35	1,027	$ 36,175	$ 57,626	$ 59,184,615	901	471
32.00	1	4,480	4,719	1,565	0.35	1,649	$ 31,662	$ 50,437	$ 83,147,340	1,554	864
35.00	1	3,498	3,685	833	0.24	877	$ 18,940	$ 30,171	$ 26,474,066	834	233
36.00	1	3,915	4,124	1,611	0.41	1,697	$ 22,485	$ 35,818	$ 60,783,276	1,603	275
37.00	1	4,990	5,256	1,797	0.36	1,893	$ 26,223	$ 41,772	$ 79,072,619	1,792	161
38.00	1	4,718	4,970	2,460	0.52	2,591	$ 37,889	$ 60,356	$ 156,402,583	2,445	536
39.00	1	4,643	4,891	2,857	0.62	3,010	$ 42,532	$ 67,752	$ 203,902,108	2,854	736
40.01	1	3,474	3,659	2,293	0.66	2,415	$ 59,008	$ 93,998	$ 227,044,309	2,346	1,028
40.02	1	2,778	2,926	1,831	0.66	1,929	$ 54,260	$ 86,434	$ 166,710,827	1,760	620
44.00	1	2,589	2,727	1,078	0.42	1,136	$ 42,500	$ 67,701	$ 76,878,228	1,144	515
		64,981	**68,450**	**27,997**		**29,492**		**$ 55,272**	**$ 1,726,121,983**	**28,007**	**8,057**

Census Tract Analysis

Census Tract	Ward	Population (2000)	Estimated 2012 Population	Households 2000	Proportion of Household to Population 2000	Estimated Households 2012	Median Family Income 1999	Estimated Median Family Income 2012	Estimated 2012 Tract Buying Power	Occupied Housing Units (2000)	Owner-Occupied Housing Units (2000)
	SECONDARY										
5.01*	1, 3	2,765	2,913	1,762	0.64	1,856	$ 65,521	$ 104,373	$ 193,723,404	1,793	329
20.02	4	3,781	3,983	1,288	0.34	1,357	$ 47,619	$ 75,855	$ 102,918,111	1,278	862
21.01	4	5,233	5,512	1,934	0.37	2,037	$ 34,975	$ 55,714	$ 113,503,660	1,938	842
22.01	4	3,505	3,692	1,130	0.32	1,190	$ 44,388	$ 70,709	$ 84,166,582	1,135	905
22.02	4	3,013	3,174	1,259	0.42	1,326	$ 43,562	$ 69,393	$ 92,029,955	1,259	588
23.01	4	2,995	3,155	1,055	0.35	1,111	$ 44,069	$ 70,200	$ 78,015,577	1,048	760
23.02	5	2,432	2,562	565	0.23	595	$ 49,515	$ 78,876	$ 46,944,088	567	166
24.00	4	3,580	3,771	1,256	0.35	1,323	$ 37,304	$ 59,424	$ 78,621,389	1,252	792
25.01	4	2,392	2,520	887	0.37	934	$ 51,510	$ 82,054	$ 76,667,419	885	542
25.02	4	5,486	5,779	1,921	0.35	2,024	$ 32,688	$ 52,071	$ 105,368,643	1,920	737
26.00	4	2,184	2,301	971	0.44	1,023	$ 85,180	$ 135,689	$ 138,788,198	964	691
33.01	5	2,707	2,852	1,025	0.38	1,080	$ 39,107	$ 62,296	$ 67,262,660	1,030	647
33.02	5	1,830	1,928	641	0.35	675	$ 45,938	$ 73,178	$ 49,411,244	643	381
34.00*	1, 5	4,249	4,476	1,056	0.25	1,112	$ 18,452	$ 29,393	$ 32,696,633	1,058	351
41.00	2	2,570	2,707	1,530	0.60	1,612	$ 88,170	$ 140,452	$ 226,364,304	1,585	771
42.01*	1, 2	3,392	3,573	2,148	0.63	2,263	$ 53,500	$ 85,224	$ 192,834,053	2,160	749
42.02	2	2,889	3,043	1,969	0.68	2,074	$ 47,745	$ 76,056	$ 157,749,970	1,908	522
43.00*	1, 2	3,290	3,466	1,830	0.56	1,928	$ 39,841	$ 63,465	$ 122,342,399	1,755	434
46.00	5	2,997	3,157	1,087	0.36	1,145	$ 33,142	$ 52,794	$ 60,451,061	1,081	494
48.01*	1, 2	1,876	1,976	846	0.45	891	$ 24,388	$ 38,849	$ 34,621,208	859	337
48.02	2	2,853	3,005	1,185	0.42	1,248	$ 27,559	$ 43,901	$ 54,799,611	1,154	172
49.01	2	2,013	2,120	879	0.44	926	$ 18,950	$ 30,187	$ 27,950,769	838	245
49.02	2	2,286	2,408	973	0.43	1,025	$ 30,647	$ 48,820	$ 50,037,601	1,008	102
50.00	2	7,278	7,667	3,621	0.50	3,814	$ 33,257	$ 52,977	$ 202,072,524	3,614	827
52.01	2	4,559	4,802	3,043	0.67	3,205	$ 35,561	$ 56,647	$ 181,581,495	3,039	717
53.01	2	5,045	5,314	3,685	0.73	3,882	$ 50,510	$ 80,461	$ 312,327,721	3,692	1,229
87.01	5	2,415	2,544	820	0.34	864	$ 40,234	$ 64,091	$ 55,360,848	761	492
92.03	5	2,861	3,014	1,146	0.40	1,207	$ 31,419	$ 50,049	$ 60,418,877	1,167	554
95.01	5	5,264	5,545	1,766	0.34	1,860	$ 28,605	$ 45,567	$ 84,767,295	1,767	306
		94,975	**102,958**	**41,516**		**45,589**		**$ 67,199**	**$ 3,083,797,298**	**43,158**	**16,544**

* tract split between two wards

Secondary		
Ward	Frequency	Proportion
2	11	38%
3	1	3%
4	9	31%
5	8	28%
	29	

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Retail Demand Analysis

Trade	Estimated Population (2012)	Estimated Households (2012)	Estimated Median HH Income (2012)	Spending Power
Primary	68,450	29,492	$55,272	$1,726,121,983
Secondary	94,975	45,589	$67,199	$3,083,797,298
TOTAL	**163,425**	**75,080**		**$4,809,919,281**

SPENDING PATTERNS (2004-2005, BLS)

	U.S.	U.S.	D.C	D.C	Primary (total)	Secondary (total)	Total Trade Area
Total Expenditures		$44,928		$55,977	$1,726,121,983	$3,083,797,298	$4,809,919,281
Housing	32.5%	$14,602	38.4%	$21,495	$662,830,842	$1,184,178,162	$1,847,009,004
Food at Home	7.4%	$3,322	5.5%	$3,055	$94,204,810	$168,301,280	$262,506,090
Food away from Home	5.6%	$2,533	5.0%	$2,776	$85,601,490	$152,931,048	$238,532,539
Alcoholic Bevs	1.0%	$449	1.0%	$560	$17,261,220	$30,837,973	$48,099,193
Apparel and Services	4.1%	$1,842	4.0%	$2,239	$69,044,879	$123,351,892	$192,396,771
Entertainment	5.1%	$2,291	4.7%	$2,631	$81,127,733	$144,938,473	$226,066,206

Retail Demand Analysis

Site Capture of Spending

Grocery Store Competition (from Wash DC Econ Partnership)

Store	Distance	Address	Size (sf)	Delivery (if applicable)	Comment
Giant	0.7 miles	1414 8th St NW	71,000	2011	old store, rough neighborhood, part of O St Market redevelopment (see Pipeline Note #1)
Whole Foods	0.8 miles	1440 P St NW	42,000	2000	specialty shopper, too expensive for students
Safeway	1.0 miles	1701 Corcoran St NW			old, small store, not full-service, no parking - NOT COMPETITIVE
Giant	1.0 miles	1345 Park Rd NW	53,000	2005	brand new, ample free parking on 2nd level, across from Metro station
Safeway	1.1 miles	1747 Columbia Rd NW			old store, limited parking - NOT COMPETITIVE
Safeway	1.2 miles	514 Rhode Island Ave	55,000		
Safeway	1.3 miles	1800 20th St NW			old, small store, not full-service, no parking - NOT COMPETITIVE
Safeway		5th and K St NW	55,000	2008	part of City Vista development
Safeway	1.4 miles	3830 Georgia Ave NW	53,000		old store
Harris Teeter	1.5 miles	1631 Kalorama Rd NW	40,000	2008	brand new, ample free parking 1st floor (store on 2nd floor)
Giant	1.7 miles	1050 Brentwood Av NE	54,000	2002	
AVERAGE			52,875		

Competitive SF within 1.0 miles	166,000
Competitive SF within 2.0 miles	257,000
Subject Store	54,600
Capture Rate within 1.0 miles	24.8%
Capture Rate within 2.0 miles	8.8%

GROCERY STORE DEMAND

Grocery Store Spending	$262,506,090
Add Inflow*	10.0%
Total Grocery Store Spending	$288,756,699
Blended Site Capture	16.8%
Capture of Spending	$48,383,946
Required Sales per SF	$500.00
Supportable SF	96,768

RETAIL STORE DEMAND

Retail Store Spending	$656,995,516
Add Inflow*	10.0%
Total Retail Store Spending	$722,695,068
Site Capture	1.0%
Capture of Spending	$7,226,951
Required Sales per SF	$350.00
Supportable SF	20,648

* inflow accounts for consumers living outside of the trade area patronizing grocery and retail stores
Employees Within Shaw = 95,465 (per Wash DC Economic Partnerhip)
Reeves Center employees = 1,000 (per Wash DC Economic Partnership)
Residents Within 0.5 miles of Howard University Hospital = 17,681 (per WDCEP)
Beds at Howard University Hospital = 479
Doctors and other staff at Howard University Hospital ~ 2,500
Traffic Count on 7th St = 10,400 (per Wash DC Economic Partnership)
Traffic Count on Florida Ave = 27,500 (per Wash DC Economic Partnership)
Ave Weekday Count Howard/Shaw Metro Station = 7,544 (per Wash DC Economic Partnership)
Ave Weekend Count Howard/Shaw Metro Station = 7,628 (per Wash DC Economic Partnership)
Ave Weekday Count U St Metro Station = 10,924 (per Wash DC Economic Partnership)
Ave Weekend Count U St Metro Station = 14,165 (per Wash DC Economic Partnership)

Retail Comparables

Tenant	Center/Location	Date	SF	Rent	Term
Oxxo Cleaners	Columbia Heights	1/1/2006	2,000	$ 50.00	
Citibank	Columbia Heights	1/1/2006	3,733	$ 55.00	
T-Mobile	Columbia Heights	1/1/2006	1,600	$ 62.00	
BB&T Bank	Kenyon Sq Condos/ Col Heights	1Q 2008	4,037	$ 70.00	
PNC Bank	Kenyon Sq Condos/ Col Heights	1Q 2008	3,160	$ 61.00	
FedEx	Kenyon Sq Condos/ Col Heights	1Q 2008	2,268	$ 55.00	
Starbucks	Kenyon Sq Condos/ Col Heights	1Q 2008	1,948	$ 55.00	
FedEx Kinkos	Kenyon Sq Condos/ Col Heights	1Q 2008	3,121	$ 52.00	
Radience MedSpa	Kenyon Sq Condos/ Col Heights	1Q 2008	1,770	$ 50.00	
Georgetown Valet	Kenyon Sq Condos/ Col Heights	1Q 2008	1,123	$ 45.00	
Heights Restaurant	Kenyon Sq Condos/ Col Heights	1Q 2008	3,098	$ 45.00	
T-Mobile	Park Road and Homestead Pl NW/ Park Triangle	1/1/2006	1,600	$ 62.00	10
Citibank	Park Road and Homestead Pl NW/ Park Triangle	1/1/2006	3,733	$ 55.00	10
Redeem	1734 14th St NW/ Park Triangle	7/1/2006	1,400	$ 45.00	6
Available	1015 7th St NW		3,600	$36.00	5-10
Available	12th and U St NW		2,180	$45.00	
AVERAGE			2,523	$ 52.69	

Residential Demand Analysis

Population Growth

Market	Estimated Population (2008)	Estimated Population (2012)	Population Growth	Median HH Income (2012)
Primary (Ward 1)	67,101	68,450	1,349	$55,272
Secondary	98,074	102,958	4,884	$67,199

Total DC Housing Units (2000) 274,845
Ratio of Rental Apt to Total 45.6%

Market	Occupied Housing Units (2000)	Estimated Occupied Housing Units (2012)	Owner-Occupied Housing Units (2000)	Rental Housing Units (2000)	Rental Apt Units (2000)	Percent Rental (2000)
Primary (Ward 1)	28,007	29,502	8,057	19,950	14,683	71.2%
Secondary	43,158	45,462	16,544	26,614	15,019	61.7%
DC	248,338	261,597	101,216	160,381	125,308	64.6%

*owner and renter occupied from 2000

Ward	Trade	Proportion in Trade	1-unit detached*	1-unit attached*	Apartment* (2-unit and above)	Average HH Size
1	Primary	100.0%	2.5%	23.9%	73.6%	2.17
2	Secondary	37.9%	3.0%	15.5%	81.5%	1.65
3	Secondary	3.4%	26.7%	10.6%	62.7%	1.83
4	Secondary	31.0%	29.4%	35.6%	35.0%	2.51
5	Secondary	27.6%	17.8%	36.9%	45.3%	2.36
Weighted Ave	Secondary		**16.1%**	**27.5%**	**56.4%**	**2.12**

Market	Population Growth (2008-2012)	New Growth Demanding Apts	New Growth Demanding Rental Apts	New Rental Apt Units Demanded Accounting for HH Size
Primary (Ward 1)	1,349	993	707	326
Secondary	4,884	2,757	1,700	802
TOTAL	**6,234**	**3,749**	**2,407**	**1,128**

Residential Demand Analysis

Churn

* from U.S. Census - DC Office of Planning

Tenure	Median Year Householder Moved Into Unit (DC) *	Years in Unit (from 2000)	Churn
Occupied	1995	5	20%
Owner-Occupied	1987	13	8%
Renter-Occupied	1997	3	33%

* based on ratio of Market occupied units to city-wide

Market	Estimated Occupied Housing Units (2012)	Churn-Created Unit Demand Per Year (DC)	Market Capture of Churn Demand*	Churn-Created Demand for Rental Apt Units	Churn-Created Unit Demand Years 2008-2012 (DC)	Churn Rental Apt Units Demanded Accounting for HH Size
Primary (Ward 1)	29,502		5,900	3,093	12,374	5,702
Secondary	45,462		9,092	3,164	12,657	5,973
DC	261,597	52,319				
TOTAL	**74,964**	**0**	**14,993**	**6,258**	**25,031**	**11,675**

Howard Univ

more likely to be renters and have low HH size

Market	Student Population	Undergrad Students	Grad and Professional Students	Grad and Pro Students Living in HU Housing	Grad and Pro Students Not Living in HU Housing	Less Law Students	Apt Demand from Grad and Pro HU Students
Howard Univ	10,586	7,112	3,474	389	3,085	2,635	2,108
TOTAL	**10,586**	**7,112**	**3,474**	**389**	**3,085**	**2,635**	**2,108**

TOTAL MARKET RENTAL APARTMENT DEMAND (2008-2012) 14,912

Site Capture

Market Pipeline (2010-2012)	Primary Market Demand	Capture of New Demand (Primary)	Secondary Market Demand	Capture of New Demand (Secondary)	Churn Demand (Primary)	Capture of Churn Demand (Primary)	Churn Demand (Secondary)	Capture of Churn Demand (Secondary)	HU Demand	Capture of HU Demand
1,904	326	22.3%	802	5.6%	5,702	2.8%	5,973	1.4%	2,108	3.0%
TOTAL DEMAND		73		45		160		84	63	

TOTAL SITE CAPTURE OF RENTAL APARTMENT DEMAND 425

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Residential Comparables

Name and Location	Distance from Subject	Year Built	No. Units	Occupancy	BR/BA	Size (SF)	Ave SF	Base Quoted Rent $/Unit	Base Quoted Unit $/SF	Ave $/SF	Utilities, Premiums, Amenities	Parking	Comment
The Ellington 1301 U St NW		2004	190	96%	1/1/JR 1/1 1/1/Loft 1/1/Den 2/2 2/2/Den 2/2/Loft	562 - 658 698 - 813 804 - 916 824 - 917 814 - 1,080 1,095 - 1,095 1,140 - 1,162	610 756 860 871 947 1095 1151	$1,670 - $1,993 $2,095 - $2,518 $2,410 - $2,735 $2,470 - $2,790 $2,440 - $3,210 $3,320 - $3,660 $3,395 - $3,485	$2.97 - $3.03 $3.00 - $3.10 $2.99 - $3.00 $3.00 - $3.04 $2.97 - $3.00 $3.03 - $3.34 $2.98 - $3.00	$3.00 $3.05 $3.00 $3.02 $2.99 $3.19 $2.99	Tenant pays all utilities, Rooftop terrace, fitness, business center, concierge, party room, first floor retail – No Concessions	$150 - $195/month	Very popular, have employed tenant waiting list at times, across the street from U St Metro Station
Camden Roosevelt 2101 16th St NW		Renovated in 2003	198	97%	0/1 1/1 2/2	495 - 547 552 - 891 948 - 1,641	521 722 1295	$1,555 - $1,580 $1,750 - $2,042 $2,500 - $3,750	$2.89 - $3.14 $2.29 - $3.17 $2.29 - $2.64	$3.02 $2.73 $2.47	Tenant pays water and electric, Fitness center, business center, party room, courtyard, billiard room – No Concessions	$210	4 blocks from U St Metro Station
Highland Park 1375 Kenyon St NW		2006	235	15%	1/1 1/1.5 Loft 1/2 Den/Loft 2/2 2/2/Den	539 - 667 926 - 1,007 1,173 - 1,207 950 - 1,130 1,108 - 1,361	603 967 1190 1040 1235	$1,810 - $2,300 $2,680 - $2,950 $3,580 - $3,875 $2,775 - $3,095 $3,035 - $2,940	$3.36 - $3.45 $2.89 - $2.93 $3.05 - $3.21 $2.74 - $2.92 $2.16 - $2.74	$3.41 $2.91 $3.13 $2.83 $2.45	Tenant pays electric, Billiard room, concierge, business center, fitness center, atrium – Concession: 1 month free on all units	$200	Leasing up - Delivered 1st quarter 2008; leased over 50 units between May and June, across the street from Columbia Heights Metro Station and DCUSA retail
The Desoto 1445 P St NW		2004	66	100%	Studio 1/1 1/2/Den 1/1 PH 2/2	413 - 453 649 - 679 836 - 1,090 860 - 1,040 858 - 1,092	433 664 963 950 975	$1,500 - $1,900 $2,050 - $2,300 $2,450 - $2,675 $2,995 - $3,030 $2,600 - $2,800	$3.63 - $4.19 $3.16 - $3.39 $2.45 - $2.93 $3.48 - $2.91 $2.56 - $3.03	$3.91 $3.28 $2.69 $3.20 $2.80	Tenant pays all utilities, $200 annual amenity fee Rooftop terrace, concierge, first floor retail – No Concessions	$225	Across the street from Whole Foods, several blocks from Metro
The Regent 1640 16th St NW		2001	55	97%	2/2 3/2	843 - 1,596 1,596 - 1,596	1220 1596	$2,350 - $5,200 $5,200 - $5,200	$3.26 - $2.79 $3.26 - $3.26	$3.03 $3.26	Tenant pays gas and electric, Controlled access, extra storage, concierge – No Concessions	$225	Several blocks to Metro and Whole Foods
The Hudson 1425 P St NW		2003	84	100%	1/1 1/2/Den 2/2	649 - 728 836 - 1,090 858 - 1,092	689 963 975	$2,125 - $2,620 $2,830 - $3,050 $2,850 - $3,645	$3.27 - $3.60 $2.80 - $3.39 $3.32 - $3.34	$3.44 $3.10 $3.33	Tenant pays electric, $200 annual amenity fee, Rooftop terrace, concierge, retail – Concession: 1 month free on all units	$225	Across the street from Whole Foods, several blocks from Metro
												$217	
STUDIO/JR 1BR AVERAGE							521 sf			$3.31			
1 BR AVERAGE							850 sf			$3.08			
2BR AVERAGE							1104 sf			$2.90			
3BR							1596 sf			$3.26			
TOTAL AVERAGE							931 sf			$3.05			

Pipeline

Development	Address	Retail	Residential (units)	Other	Delivery
O St Market Redevelopment	1414 8th St NW - PRIMARY	Double the size of the existing Giant, several other storefronts	630	200 hotel rooms, hundreds of parking spaces	2010-2011
Nehemiah Shopping Center Redevelopment	2400 14th St NW - PRIMARY	17,000 sf	255		2010-2011
View 14	1821 14th St NW	34,000 sf	185	Projecting rents in excess of $3.00 sf	Late 2009
Broadcast Center One	7th and S St NW - PRIMARY	25,000 sf	180	103,000 office including Radio One headquarters, $10mil renovation of Howard Theatre	2010-2011
Anthony Bowen YMCA	1325 W St NW	12,000 sf	229	New 45,000sf YMCA facility	2010-2011
TOTAL			1,479		

Zoning Analysis

Zoning Analysis

Lot (sq ft)	97,679	
	Matter-of-Right	PUD Permitted
Max Height (in)	1,080	1,320
FAR	6.0	8.0
Lot Occupancy	75%	75%
Max SF	586,074	781,432
Av Slab-to-Slab (in)	135	132
Av Slab-to-Slab (ft)	11' 3"	11' 0"
Floors	8	10
Floorplate	73,259	73,259
Grocery Store	55,000	55,000
Retail	20,255	20,255
Gross Residential	510,819	706,177
Core Factor	76,623	105,927
Net Residential	434,196	600,250
Ave Apt	931	931
Apts	466	**645**

15%

Not enough demand to satisfy added density

Building Program

Lot (sq ft)	97,679
Height (in)	1080
FAR	6.0
Lot Occupancy	75%
SF	550,027
Floorplate	70,000
Floors	8
Residential Floors	7
Apts	425
Grocery Store	54,600
Retail	15,400
Gross Residential	480,027
Core Factor	74,404
Net Residential	415,608
TOTAL BLDG	550,027

Floor 1		Floors 2-8	
Use	Size (sf)	Use	Size (sf)
Grocery Store[1]	54,600	Net Residential	59,373
Retail #1	2,200	Core/Common/Amenities	10,629
Retail #2	2,200		
Retail #3	2,200		
Retail #4	2,200		
Retail #5	2,200		
Retail #6	2,200		
Retail #7	2,200		
TOTAL	70,000	TOTAL	70,002

Parking[1]

Retail	In excess of 3,000 sf, 1 spot for each additional 750 sf of gross floor area			
Residential	1 for every 3 dwelling units			
Retail	70,000	67,000	89.33333333	90
Residential	425		141.67	142
TOTAL PARKING REQUIRED				232

Property Tax[2]

Class	Tax Rate per $100	Description	
1	$ 0.85	Residential real property, including multifamily	
2	$ 1.85	Commercial and industrial real property, including hotels and motels	
			Tax
Hard Cost - Resi	$ 97,595,066		$ 829,558.06
Hard Cost - Retail	$ 15,838,000		$ 293,003.00
TOTAL PROPERTY TAX - BASE YEAR			$ 1,122,561.06

Notes:
1 - Per D.C. Municipal Regulations
2 - Per D.C. Office of Tax and Revenue

Development Budget

Standard Scenario

	Factor	Unit	Cost/Unit	Total Cost
Demolition	195,358	exist square ft	$5	$976,790
Residential Construction[1]	480,027	resi square ft	$190	$91,205,066
Below Grade Parking[1]	232	space	$45,000	$10,440,000
Retail Construction[1]	70,000	tot ret square ft	$125	$8,750,000
Grocery Tenant Improvements[2]	54,600	groc square ft	$50	$2,730,000
Retail Tenant Improvements[2]	15,400	ret square ft	$20	$308,000
Architect/Engineer Services[3]	550,027	bldg square ft	$6	$3,300,160
Other Consultants[3]	550,027	bldg square ft	$3	$1,650,080
Land Value	550,027	bldg square ft	$100	$55,002,666
Developer Fee[1]	$120,102,632	hard/soft costs	4.0%	$4,804,105
Other Costs (permits, utility fees, insurance, etc)[1]	550,027		$0.50	$275,013
Property Tax During Construction	$55,002,666	land value/100	$0.85	$467,523
Construction Period Interest Carry				$9,992,539
Construction Loan Point			1.0%	$1,244,392
TOTAL DEVELOPMENT COST			$347.52	$191,146,334

Construction Period Interest Carry[3]		
Construction Loan Interest Rate	8.0%	
Hard and Soft Costs (excl. land)	$124,906,737	
Loan Outstanding Factor	50.0%	
Loan Outstanding Time	24	months

Ground Lease

Land Value	$55,002,666	
Ground Lease Discount Rate	6.00%	
Lease Term	99	Yrs
Annual Fixed Payment	-$3,310,502.18	
Fee to Execute Ground Lease	$250,000	

Residential Only Scenario

	Factor	Unit	Cost/Unit	Total Cost
Demolition	195,358	exist square ft	$5	$976,790
Residential Construction	480,027	resi square ft	$190	$91,205,066
Below Grade Parking (per space)	142	space	$45,000	$6,390,000
Architect/Engineer Services	480,027	bldg square ft	$6	$2,880,160
Other Consultants	480,027	bldg square ft	$3	$1,440,080
Land Value	480,027	bldg square ft	$100	$48,002,666
Property Tax During Construction	$48,002,666	land value/100	$0.85	$408,023
Developer Fee	$103,540,132	hard/soft costs	4.0%	$4,141,605
Other Costs (permits, utility fees, insurance, etc)	480,027		$0.50	$240,013
Construction Period Interest Carry		see table at rt		$8,614,539
Construction Loan Point			1.0%	$1,076,817
TOTAL DEVELOPMENT COST			$374.59	$155,684,403

Construction Period Interest Carry		
Construction Loan Interest Rate	8.0%	
Hard and Soft Costs (excl. land)	$107,681,737	
Loan Outstanding Factor	50.0%	
Loan Outstanding Time	24	months

Ground Lease

Land Value	$48,002,666	
Ground Lease Discount Rate	6.00%	Yrs
Lease Term	99	
Annual Fixed Payment	-$2,889,185.96	
Fee to Execute Ground Lease	$250,000	

Notes:
1 - Per unnamed D.C. developer
2 - Per David Dochter, Cushman & Wakefield
3 - Per Mark Hassinger, WestDulles Properties

Mortgage Analysis

Normal Scenario

Max Loan

Stabilized NOI (Yr 3)	$12,891,030	Stabilized CF After Lease Before Debt		$9,446,573
Cap Rate	5.5%	Minimum DSCR		1.20
Implied Value	$234,382,368	Annual Pmt		$7,872,144.46
LTV	75%	Rate	6.50%	
		Amortization	30 years	
		Term	10 years	
Max Loan	$175,786,776	Max Loan		$103,788,202.16

Development Cost[1]	$136,143,668	Note: 1. Excluding Land Value
Mortgage	$103,788,202	
Equity	$32,355,466	
Rate	6.50%	
Amortization	30	years
Term	10	years
Monthly Payment	($656,012.04)	

Mortgage Analysis

Normal Scenario

Amortization Schedule

Month	Beg. Balance	Payment	int	prin	end balance
1	$103,788,202.16	$656,012.04	$562,186.10	$93,825.94	$103,694,376.22
2	$103,694,376.22	$656,012.04	$561,677.87	$94,334.17	$103,600,042.05
3	$103,600,042.05	$656,012.04	$561,166.89	$94,845.14	$103,505,196.91
4	$103,505,196.91	$656,012.04	$560,653.15	$95,358.89	$103,409,838.02
5	$103,409,838.02	$656,012.04	$560,136.62	$95,875.42	$103,313,962.60
6	$103,313,962.60	$656,012.04	$559,617.30	$96,394.74	$103,217,567.86
7	$103,217,567.86	$656,012.04	$559,095.16	$96,916.88	$103,120,650.98
8	$103,120,650.98	$656,012.04	$558,570.19	$97,441.85	$103,023,209.14
9	$103,023,209.14	$656,012.04	$558,042.38	$97,969.66	$102,925,239.48
10	$102,925,239.48	$656,012.04	$557,511.71	$98,500.32	$102,826,739.16
11	$102,826,739.16	$656,012.04	$556,978.17	$99,033.87	$102,727,705.29
12	$102,727,705.29	$656,012.04	$556,441.74	$99,570.30	$102,628,134.99
13	$102,628,134.99	$656,012.04	$555,902.40	$100,109.64	$102,528,025.35
14	$102,528,025.35	$656,012.04	$555,360.14	$100,651.90	$102,427,373.45
15	$102,427,373.45	$656,012.04	$554,814.94	$101,197.10	$102,326,176.35
16	$102,326,176.35	$656,012.04	$554,266.79	$101,745.25	$102,224,431.10
17	$102,224,431.10	$656,012.04	$553,715.67	$102,296.37	$102,122,134.73
18	$102,122,134.73	$656,012.04	$553,161.56	$102,850.47	$102,019,284.26
19	$102,019,284.26	$656,012.04	$552,604.46	$103,407.58	$101,915,876.68
20	$101,915,876.68	$656,012.04	$552,044.33	$103,967.71	$101,811,908.97
21	$101,811,908.97	$656,012.04	$551,481.17	$104,530.86	$101,707,378.11
22	$101,707,378.11	$656,012.04	$550,914.96	$105,097.07	$101,602,281.03
23	$101,602,281.03	$656,012.04	$550,345.69	$105,666.35	$101,496,614.68
24	$101,496,614.68	$656,012.04	$549,773.33	$106,238.71	$101,390,375.97
25	$101,390,375.97	$656,012.04	$549,197.87	$106,814.17	$101,283,561.81
26	$101,283,561.81	$656,012.04	$548,619.29	$107,392.74	$101,176,169.06
27	$101,176,169.06	$656,012.04	$548,037.58	$107,974.46	$101,068,194.61
28	$101,068,194.61	$656,012.04	$547,452.72	$108,559.32	$100,959,635.29
29	$100,959,635.29	$656,012.04	$546,864.69	$109,147.35	$100,850,487.94
30	$100,850,487.94	$656,012.04	$546,273.48	$109,738.56	$100,740,749.38
31	$100,740,749.38	$656,012.04	$545,679.06	$110,332.98	$100,630,416.40
32	$100,630,416.40	$656,012.04	$545,081.42	$110,930.62	$100,519,485.79
33	$100,519,485.79	$656,012.04	$544,480.55	$111,531.49	$100,407,954.30
34	$100,407,954.30	$656,012.04	$543,876.42	$112,135.62	$100,295,818.68
35	$100,295,818.68	$656,012.04	$543,269.02	$112,743.02	$100,183,075.66
36	$100,183,075.66	$656,012.04	$542,658.33	$113,353.71	$100,069,721.94
37	$100,069,721.94	$656,012.04	$542,044.33	$113,967.71	$99,955,754.23
38	$99,955,754.23	$656,012.04	$541,427.00	$114,585.04	$99,841,169.20
39	$99,841,169.20	$656,012.04	$540,806.33	$115,205.70	$99,725,963.49
40	$99,725,963.49	$656,012.04	$540,182.30	$115,829.74	$99,610,133.76
41	$99,610,133.76	$656,012.04	$539,554.89	$116,457.15	$99,493,676.61
42	$99,493,676.61	$656,012.04	$538,924.08	$117,087.96	$99,376,588.65
43	$99,376,588.65	$656,012.04	$538,289.86	$117,722.18	$99,258,866.47
44	$99,258,866.47	$656,012.04	$537,652.19	$118,359.84	$99,140,506.63
45	$99,140,506.63	$656,012.04	$537,011.08	$119,000.96	$99,021,505.67
46	$99,021,505.67	$656,012.04	$536,366.49	$119,645.55	$98,901,860.12
47	$98,901,860.12	$656,012.04	$535,718.41	$120,293.63	$98,781,566.49
48	$98,781,566.49	$656,012.04	$535,066.82	$120,945.22	$98,660,621.27
49	$98,660,621.27	$656,012.04	$534,411.70	$121,600.34	$98,539,020.93
50	$98,539,020.93	$656,012.04	$533,753.03	$122,259.01	$98,416,761.92
51	$98,416,761.92	$656,012.04	$533,090.79	$122,921.24	$98,293,840.68
52	$98,293,840.68	$656,012.04	$532,424.97	$123,587.07	$98,170,253.61
53	$98,170,253.61	$656,012.04	$531,755.54	$124,256.50	$98,045,997.11
54	$98,045,997.11	$656,012.04	$531,082.48	$124,929.55	$97,921,067.56

Mortgage Analysis

Month	Beg. Balance	Payment	int	prin	end balance
55	$97,921,067.56	$656,012.04	$530,405.78	$125,606.26	$97,795,461.30
56	$97,795,461.30	$656,012.04	$529,725.42	$126,286.62	$97,669,174.68
57	$97,669,174.68	$656,012.04	$529,041.36	$126,970.68	$97,542,204.00
58	$97,542,204.00	$656,012.04	$528,353.61	$127,658.43	$97,414,545.57
59	$97,414,545.57	$656,012.04	$527,662.12	$128,349.92	$97,286,195.66
60	$97,286,195.66	$656,012.04	$526,966.89	$129,045.14	$97,157,150.51
61	$97,157,150.51	$656,012.04	$526,267.90	$129,744.14	$97,027,406.37
62	$97,027,406.37	$656,012.04	$525,565.12	$130,446.92	$96,896,959.45
63	$96,896,959.45	$656,012.04	$524,858.53	$131,153.51	$96,765,805.94
64	$96,765,805.94	$656,012.04	$524,148.12	$131,863.92	$96,633,942.02
65	$96,633,942.02	$656,012.04	$523,433.85	$132,578.19	$96,501,363.84
66	$96,501,363.84	$656,012.04	$522,715.72	$133,296.32	$96,368,067.52
67	$96,368,067.52	$656,012.04	$521,993.70	$134,018.34	$96,234,049.18
68	$96,234,049.18	$656,012.04	$521,267.77	$134,744.27	$96,099,304.91
69	$96,099,304.91	$656,012.04	$520,537.90	$135,474.14	$95,963,830.77
70	$95,963,830.77	$656,012.04	$519,804.08	$136,207.95	$95,827,622.82
71	$95,827,622.82	$656,012.04	$519,066.29	$136,945.75	$95,690,677.07
72	$95,690,677.07	$656,012.04	$518,324.50	$137,687.54	$95,552,989.53
73	$95,552,989.53	$656,012.04	$517,578.69	$138,433.34	$95,414,556.19
74	$95,414,556.19	$656,012.04	$516,828.85	$139,183.19	$95,275,373.00
75	$95,275,373.00	$656,012.04	$516,074.94	$139,937.10	$95,135,435.89
76	$95,135,435.89	$656,012.04	$515,316.94	$140,695.09	$94,994,740.80
77	$94,994,740.80	$656,012.04	$514,554.85	$141,457.19	$94,853,283.61
78	$94,853,283.61	$656,012.04	$513,788.62	$142,223.42	$94,711,060.19
79	$94,711,060.19	$656,012.04	$513,018.24	$142,993.80	$94,568,066.39
80	$94,568,066.39	$656,012.04	$512,243.69	$143,768.35	$94,424,298.05
81	$94,424,298.05	$656,012.04	$511,464.95	$144,547.09	$94,279,750.96
82	$94,279,750.96	$656,012.04	$510,681.98	$145,330.05	$94,134,420.91
83	$94,134,420.91	$656,012.04	$509,894.78	$146,117.26	$93,988,303.65
84	$93,988,303.65	$656,012.04	$509,103.31	$146,908.73	$93,841,394.92
85	$93,841,394.92	$656,012.04	$508,307.56	$147,704.48	$93,693,690.44
86	$93,693,690.44	$656,012.04	$507,507.49	$148,504.55	$93,545,185.89
87	$93,545,185.89	$656,012.04	$506,703.09	$149,308.95	$93,395,876.94
88	$93,395,876.94	$656,012.04	$505,894.33	$150,117.70	$93,245,759.24
89	$93,245,759.24	$656,012.04	$505,081.20	$150,930.84	$93,094,828.40
90	$93,094,828.40	$656,012.04	$504,263.65	$151,748.38	$92,943,080.01
91	$92,943,080.01	$656,012.04	$503,441.68	$152,570.35	$92,790,509.66
92	$92,790,509.66	$656,012.04	$502,615.26	$153,396.78	$92,637,112.88
93	$92,637,112.88	$656,012.04	$501,784.36	$154,227.68	$92,482,885.20
94	$92,482,885.20	$656,012.04	$500,948.96	$155,063.08	$92,327,822.13
95	$92,327,822.13	$656,012.04	$500,109.04	$155,903.00	$92,171,919.13
96	$92,171,919.13	$656,012.04	$499,264.56	$156,747.48	$92,015,171.65
97	$92,015,171.65	$656,012.04	$498,415.51	$157,596.52	$91,857,575.12
98	$91,857,575.12	$656,012.04	$497,561.87	$158,450.17	$91,699,124.95
99	$91,699,124.95	$656,012.04	$496,703.59	$159,308.44	$91,539,816.51
100	$91,539,816.51	$656,012.04	$495,840.67	$160,171.37	$91,379,645.14
101	$91,379,645.14	$656,012.04	$494,973.08	$161,038.96	$91,218,606.18
102	$91,218,606.18	$656,012.04	$494,100.78	$161,911.25	$91,056,694.93
103	$91,056,694.93	$656,012.04	$493,223.76	$162,788.27	$90,893,906.65
104	$90,893,906.65	$656,012.04	$492,341.99	$163,670.04	$90,730,236.61
105	$90,730,236.61	$656,012.04	$491,455.45	$164,556.59	$90,565,680.02
106	$90,565,680.02	$656,012.04	$490,564.10	$165,447.94	$90,400,232.08
107	$90,400,232.08	$656,012.04	$489,667.92	$166,344.11	$90,233,887.97
108	$90,233,887.97	$656,012.04	$488,766.89	$167,245.14	$90,066,642.82
109	$90,066,642.82	$656,012.04	$487,860.98	$168,151.06	$89,898,491.77
110	$89,898,491.77	$656,012.04	$486,950.16	$169,061.87	$89,729,429.89
111	$89,729,429.89	$656,012.04	$486,034.41	$169,977.63	$89,559,452.27
112	$89,559,452.27	$656,012.04	$485,113.70	$170,898.34	$89,388,553.93
113	$89,388,553.93	$656,012.04	$484,188.00	$171,824.04	$89,216,729.89
114	$89,216,729.89	$656,012.04	$483,257.29	$172,754.75	$89,043,975.14
115	$89,043,975.14	$656,012.04	$482,321.53	$173,690.51	$88,870,284.63
116	$88,870,284.63	$656,012.04	$481,380.71	$174,631.33	$88,695,653.30
117	$88,695,653.30	$656,012.04	$480,434.79	$175,577.25	$88,520,076.06
118	$88,520,076.06	$656,012.04	$479,483.75	$176,528.29	$88,343,547.76
119	$88,343,547.76	$656,012.04	$478,527.55	$177,484.49	$88,166,063.27
120	**$88,166,063.27**	**$656,012.04**	$477,566.18	**$178,445.86**	**$87,987,617.41**

Mortgage Analysis

At 7% Scenario

		Max Loan		
Stabilized NOI (Yr 3)	$12,891,030	Stabilized CF After Lease Before Debt		$9,446,573
Cap Rate	5.5%	Minimum DSCR		1.20
Implied Value	$234,382,368	Annual Pmt		$7,872,144
LTV	75%	Rate	7.00%	
		Amortization	30 years	
		Term	10 years	
Max Loan	$175,786,776	Max Loan		$98,603,573.98

Development Cost[1]	$136,143,668	Note: 1. Excluding Land Value
Mortgage	$98,603,574	
Equity	$37,540,094	
Rate	7.00%	
Amortization	30	years
Term	10	years
Monthly Pmt	($656,012.04)	

Mortgage Analysis

At 7% Scenario

Amortization Schedule

Month	Beg. Balance	Payment	int	prin	end balance
1	$98,603,573.98	$656,012.04	$575,187.51	$80,824.52	$98,522,749.45
2	$98,522,749.45	$656,012.04	$574,716.04	$81,296.00	$98,441,453.46
3	$98,441,453.46	$656,012.04	$574,241.81	$81,770.23	$98,359,683.23
4	$98,359,683.23	$656,012.04	$573,764.82	$82,247.22	$98,277,436.01
5	$98,277,436.01	$656,012.04	$573,285.04	$82,726.99	$98,194,709.02
6	$98,194,709.02	$656,012.04	$572,802.47	$83,209.57	$98,111,499.45
7	$98,111,499.45	$656,012.04	$572,317.08	$83,694.96	$98,027,804.49
8	$98,027,804.49	$656,012.04	$571,828.86	$84,183.18	$97,943,621.31
9	$97,943,621.31	$656,012.04	$571,337.79	$84,674.25	$97,858,947.06
10	$97,858,947.06	$656,012.04	$570,843.86	$85,168.18	$97,773,778.88
11	$97,773,778.88	$656,012.04	$570,347.04	$85,664.99	$97,688,113.89
12	$97,688,113.89	$656,012.04	$569,847.33	$86,164.71	$97,601,949.18
13	$97,601,949.18	$656,012.04	$569,344.70	$86,667.33	$97,515,281.85
14	$97,515,281.85	$656,012.04	$568,839.14	$87,172.89	$97,428,108.95
15	$97,428,108.95	$656,012.04	$568,330.64	$87,681.40	$97,340,427.55
16	$97,340,427.55	$656,012.04	$567,819.16	$88,192.88	$97,252,234.67
17	$97,252,234.67	$656,012.04	$567,304.70	$88,707.34	$97,163,527.34
18	$97,163,527.34	$656,012.04	$566,787.24	$89,224.80	$97,074,302.54
19	$97,074,302.54	$656,012.04	$566,266.76	$89,745.27	$96,984,557.27
20	$96,984,557.27	$656,012.04	$565,743.25	$90,268.79	$96,894,288.48
21	$96,894,288.48	$656,012.04	$565,216.68	$90,795.36	$96,803,493.13
22	$96,803,493.13	$656,012.04	$564,687.04	$91,324.99	$96,712,168.13
23	$96,712,168.13	$656,012.04	$564,154.31	$91,857.72	$96,620,310.41
24	$96,620,310.41	$656,012.04	$563,618.48	$92,393.56	$96,527,916.85
25	$96,527,916.85	$656,012.04	$563,079.51	$92,932.52	$96,434,984.32
26	$96,434,984.32	$656,012.04	$562,537.41	$93,474.63	$96,341,509.69
27	$96,341,509.69	$656,012.04	$561,992.14	$94,019.90	$96,247,489.80
28	$96,247,489.80	$656,012.04	$561,443.69	$94,568.35	$96,152,921.45
29	$96,152,921.45	$656,012.04	$560,892.04	$95,120.00	$96,057,801.45
30	$96,057,801.45	$656,012.04	$560,337.18	$95,674.86	$95,962,126.59
31	$95,962,126.59	$656,012.04	$559,779.07	$96,232.97	$95,865,893.62
32	$95,865,893.62	$656,012.04	$559,217.71	$96,794.33	$95,769,099.30
33	$95,769,099.30	$656,012.04	$558,653.08	$97,358.96	$95,671,740.34
34	$95,671,740.34	$656,012.04	$558,085.15	$97,926.89	$95,573,813.45
35	$95,573,813.45	$656,012.04	$557,513.91	$98,498.13	$95,475,315.33
36	$95,475,315.33	$656,012.04	$556,939.34	$99,072.70	$95,376,242.63
37	$95,376,242.63	$656,012.04	$556,361.42	$99,650.62	$95,276,592.01
38	$95,276,592.01	$656,012.04	$555,780.12	$100,231.92	$95,176,360.09
39	$95,176,360.09	$656,012.04	$555,195.43	$100,816.60	$95,075,543.48
40	$95,075,543.48	$656,012.04	$554,607.34	$101,404.70	$94,974,138.78
41	$94,974,138.78	$656,012.04	$554,015.81	$101,996.23	$94,872,142.55
42	$94,872,142.55	$656,012.04	$553,420.83	$102,591.21	$94,769,551.35
43	$94,769,551.35	$656,012.04	$552,822.38	$103,189.66	$94,666,361.69
44	$94,666,361.69	$656,012.04	$552,220.44	$103,791.59	$94,562,570.10
45	$94,562,570.10	$656,012.04	$551,614.99	$104,397.05	$94,458,173.05
46	$94,458,173.05	$656,012.04	$551,006.01	$105,006.03	$94,353,167.02
47	$94,353,167.02	$656,012.04	$550,393.47	$105,618.56	$94,247,548.46
48	$94,247,548.46	$656,012.04	$549,777.37	$106,234.67	$94,141,313.79
49	$94,141,313.79	$656,012.04	$549,157.66	$106,854.37	$94,034,459.41
50	$94,034,459.41	$656,012.04	$548,534.35	$107,477.69	$93,926,981.72
51	$93,926,981.72	$656,012.04	$547,907.39	$108,104.64	$93,818,877.08
52	$93,818,877.08	$656,012.04	$547,276.78	$108,735.26	$93,710,141.82
53	$93,710,141.82	$656,012.04	$546,642.49	$109,369.54	$93,600,772.28
54	$93,600,772.28	$656,012.04	$546,004.50	$110,007.53	$93,490,764.75

Mortgage Analysis

Month	Beg. Balance	Payment	int	prin	end balance
55	$93,490,764.75	$656,012.04	$545,362.79	$110,649.24	$93,380,115.50
56	$93,380,115.50	$656,012.04	$544,717.34	$111,294.70	$93,268,820.80
57	$93,268,820.80	$656,012.04	$544,068.12	$111,943.92	$93,156,876.89
58	$93,156,876.89	$656,012.04	$543,415.12	$112,596.92	$93,044,279.97
59	$93,044,279.97	$656,012.04	$542,758.30	$113,253.74	$92,931,026.23
60	$92,931,026.23	$656,012.04	$542,097.65	$113,914.39	$92,817,111.84
61	$92,817,111.84	$656,012.04	$541,433.15	$114,578.89	$92,702,532.96
62	$92,702,532.96	$656,012.04	$540,764.78	$115,247.26	$92,587,285.69
63	$92,587,285.69	$656,012.04	$540,092.50	$115,919.54	$92,471,366.16
64	$92,471,366.16	$656,012.04	$539,416.30	$116,595.74	$92,354,770.42
65	$92,354,770.42	$656,012.04	$538,736.16	$117,275.88	$92,237,494.54
66	$92,237,494.54	$656,012.04	$538,052.05	$117,959.99	$92,119,534.56
67	$92,119,534.56	$656,012.04	$537,363.95	$118,648.09	$92,000,886.47
68	$92,000,886.47	$656,012.04	$536,671.84	$119,340.20	$91,881,546.27
69	$91,881,546.27	$656,012.04	$535,975.69	$120,036.35	$91,761,509.92
70	$91,761,509.92	$656,012.04	$535,275.47	$120,736.56	$91,640,773.36
71	$91,640,773.36	$656,012.04	$534,571.18	$121,440.86	$91,519,332.49
72	$91,519,332.49	$656,012.04	$533,862.77	$122,149.27	$91,397,183.23
73	$91,397,183.23	$656,012.04	$533,150.24	$122,861.80	$91,274,321.43
74	$91,274,321.43	$656,012.04	$532,433.54	$123,578.50	$91,150,742.93
75	$91,150,742.93	$656,012.04	$531,712.67	$124,299.37	$91,026,443.56
76	$91,026,443.56	$656,012.04	$530,987.59	$125,024.45	$90,901,419.11
77	$90,901,419.11	$656,012.04	$530,258.28	$125,753.76	$90,775,665.35
78	$90,775,665.35	$656,012.04	$529,524.71	$126,487.32	$90,649,178.03
79	$90,649,178.03	$656,012.04	$528,786.87	$127,225.17	$90,521,952.86
80	$90,521,952.86	$656,012.04	$528,044.73	$127,967.31	$90,393,985.55
81	$90,393,985.55	$656,012.04	$527,298.25	$128,713.79	$90,265,271.76
82	$90,265,271.76	$656,012.04	$526,547.42	$129,464.62	$90,135,807.14
83	$90,135,807.14	$656,012.04	$525,792.21	$130,219.83	$90,005,587.31
84	$90,005,587.31	$656,012.04	$525,032.59	$130,979.45	$89,874,607.86
85	$89,874,607.86	$656,012.04	$524,268.55	$131,743.49	$89,742,864.37
86	$89,742,864.37	$656,012.04	$523,500.04	$132,512.00	$89,610,352.38
87	$89,610,352.38	$656,012.04	$522,727.06	$133,284.98	$89,477,067.39
88	$89,477,067.39	$656,012.04	$521,949.56	$134,062.48	$89,343,004.91
89	$89,343,004.91	$656,012.04	$521,167.53	$134,844.51	$89,208,160.41
90	$89,208,160.41	$656,012.04	$520,380.94	$135,631.10	$89,072,529.30
91	$89,072,529.30	$656,012.04	$519,589.75	$136,422.28	$88,936,107.02
92	$88,936,107.02	$656,012.04	$518,793.96	$137,218.08	$88,798,888.94
93	$88,798,888.94	$656,012.04	$517,993.52	$138,018.52	$88,660,870.42
94	$88,660,870.42	$656,012.04	$517,188.41	$138,823.63	$88,522,046.79
95	$88,522,046.79	$656,012.04	$516,378.61	$139,633.43	$88,382,413.36
96	$88,382,413.36	$656,012.04	$515,564.08	$140,447.96	$88,241,965.40
97	$88,241,965.40	$656,012.04	$514,744.80	$141,267.24	$88,100,698.16
98	$88,100,698.16	$656,012.04	$513,920.74	$142,091.30	$87,958,606.86
99	$87,958,606.86	$656,012.04	$513,091.87	$142,920.16	$87,815,686.70
100	$87,815,686.70	$656,012.04	$512,258.17	$143,753.87	$87,671,932.83
101	$87,671,932.83	$656,012.04	$511,419.61	$144,592.43	$87,527,340.40
102	$87,527,340.40	$656,012.04	$510,576.15	$145,435.89	$87,381,904.52
103	$87,381,904.52	$656,012.04	$509,727.78	$146,284.26	$87,235,620.25
104	$87,235,620.25	$656,012.04	$508,874.45	$147,137.59	$87,088,482.67
105	$87,088,482.67	$656,012.04	$508,016.15	$147,995.89	$86,940,486.78
106	$86,940,486.78	$656,012.04	$507,152.84	$148,859.20	$86,791,627.58
107	$86,791,627.58	$656,012.04	$506,284.49	$149,727.54	$86,641,900.04
108	$86,641,900.04	$656,012.04	$505,411.08	$150,600.95	$86,491,299.08
109	$86,491,299.08	$656,012.04	$504,532.58	$151,479.46	$86,339,819.62
110	$86,339,819.62	$656,012.04	$503,648.95	$152,363.09	$86,187,456.53
111	$86,187,456.53	$656,012.04	$502,760.16	$153,251.87	$86,034,204.66
112	$86,034,204.66	$656,012.04	$501,866.19	$154,145.84	$85,880,058.81
113	$85,880,058.81	$656,012.04	$500,967.01	$155,045.03	$85,725,013.78
114	$85,725,013.78	$656,012.04	$500,062.58	$155,949.46	$85,569,064.33
115	$85,569,064.33	$656,012.04	$499,152.88	$156,859.16	$85,412,205.16
116	$85,412,205.16	$656,012.04	$498,237.86	$157,774.17	$85,254,430.99
117	$85,254,430.99	$656,012.04	$497,317.51	$158,694.52	$85,095,736.47
118	$85,095,736.47	$656,012.04	$496,391.80	$159,620.24	$84,936,116.22
119	$84,936,116.22	$656,012.04	$495,460.68	$160,551.36	$84,775,564.86
120	$84,775,564.86	$656,012.04	$494,524.13	**$161,487.91**	**$84,614,076.95**

Mortgage Analysis

At 7.5% Scenario

Max Loan

Stabilized NOI (Yr 3)	$12,891,030	Stabilized CF After Lease Before Debt		$9,446,573
Cap Rate	5.5%	Minimum DSCR		1.20
Implied Value	$234,382,368	Annual Pmt		$7,872,144
LTV	75%	Rate	7.50%	
		Amortization	30 years	
		Term	10 years	
Max Loan	$175,786,776	Max Loan		$93,821,285.17

Development Cost[1]	$136,143,668	Note: 1. Excluding Land Value
Mortgage	$93,821,285	
Equity	$42,322,383	
Rate	7.50%	
Amortization	30	years
Term	10	years
Monthly Pmt	($656,012.04)	

Mortgage Analysis

At 7.5% Scenario

Amortization Schedule

Month	Beg. Balance	Payment	int	prin	end balance
1	$93,821,285.17	$656,012.04	$586,383.03	$69,629.01	$93,751,656.16
2	$93,751,656.16	$656,012.04	$585,947.85	$70,064.19	$93,681,591.98
3	$93,681,591.98	$656,012.04	$585,509.95	$70,502.09	$93,611,089.89
4	$93,611,089.89	$656,012.04	$585,069.31	$70,942.73	$93,540,147.16
5	$93,540,147.16	$656,012.04	$584,625.92	$71,386.12	$93,468,761.04
6	$93,468,761.04	$656,012.04	$584,179.76	$71,832.28	$93,396,928.76
7	$93,396,928.76	$656,012.04	$583,730.80	$72,281.23	$93,324,647.53
8	$93,324,647.53	$656,012.04	$583,279.05	$72,732.99	$93,251,914.54
9	$93,251,914.54	$656,012.04	$582,824.47	$73,187.57	$93,178,726.97
10	$93,178,726.97	$656,012.04	$582,367.04	$73,644.99	$93,105,081.97
11	$93,105,081.97	$656,012.04	$581,906.76	$74,105.28	$93,030,976.70
12	$93,030,976.70	$656,012.04	$581,443.60	$74,568.43	$92,956,408.26
13	$92,956,408.26	$656,012.04	$580,977.55	$75,034.49	$92,881,373.78
14	$92,881,373.78	$656,012.04	$580,508.59	$75,503.45	$92,805,870.32
15	$92,805,870.32	$656,012.04	$580,036.69	$75,975.35	$92,729,894.98
16	$92,729,894.98	$656,012.04	$579,561.84	$76,450.19	$92,653,444.78
17	$92,653,444.78	$656,012.04	$579,084.03	$76,928.01	$92,576,516.77
18	$92,576,516.77	$656,012.04	$578,603.23	$77,408.81	$92,499,107.96
19	$92,499,107.96	$656,012.04	$578,119.42	$77,892.61	$92,421,215.35
20	$92,421,215.35	$656,012.04	$577,632.60	$78,379.44	$92,342,835.91
21	$92,342,835.91	$656,012.04	$577,142.72	$78,869.31	$92,263,966.60
22	$92,263,966.60	$656,012.04	$576,649.79	$79,362.25	$92,184,604.35
23	$92,184,604.35	$656,012.04	$576,153.78	$79,858.26	$92,104,746.09
24	$92,104,746.09	$656,012.04	$575,654.66	$80,357.37	$92,024,388.71
25	$92,024,388.71	$656,012.04	$575,152.43	$80,859.61	$91,943,529.10
26	$91,943,529.10	$656,012.04	$574,647.06	$81,364.98	$91,862,164.12
27	$91,862,164.12	$656,012.04	$574,138.53	$81,873.51	$91,780,290.61
28	$91,780,290.61	$656,012.04	$573,626.82	$82,385.22	$91,697,905.39
29	$91,697,905.39	$656,012.04	$573,111.91	$82,900.13	$91,615,005.26
30	$91,615,005.26	$656,012.04	$572,593.78	$83,418.26	$91,531,587.00
31	$91,531,587.00	$656,012.04	$572,072.42	$83,939.62	$91,447,647.39
32	$91,447,647.39	$656,012.04	$571,547.80	$84,464.24	$91,363,183.14
33	$91,363,183.14	$656,012.04	$571,019.89	$84,992.14	$91,278,191.00
34	$91,278,191.00	$656,012.04	$570,488.69	$85,523.34	$91,192,667.66
35	$91,192,667.66	$656,012.04	$569,954.17	$86,057.87	$91,106,609.79
36	$91,106,609.79	$656,012.04	$569,416.31	$86,595.73	$91,020,014.06
37	$91,020,014.06	$656,012.04	$568,875.09	$87,136.95	$90,932,877.11
38	$90,932,877.11	$656,012.04	$568,330.48	$87,681.56	$90,845,195.56
39	$90,845,195.56	$656,012.04	$567,782.47	$88,229.57	$90,756,965.99
40	$90,756,965.99	$656,012.04	$567,231.04	$88,781.00	$90,668,184.99
41	$90,668,184.99	$656,012.04	$566,676.16	$89,335.88	$90,578,849.11
42	$90,578,849.11	$656,012.04	$566,117.81	$89,894.23	$90,488,954.88
43	$90,488,954.88	$656,012.04	$565,555.97	$90,456.07	$90,398,498.81
44	$90,398,498.81	$656,012.04	$564,990.62	$91,021.42	$90,307,477.39
45	$90,307,477.39	$656,012.04	$564,421.73	$91,590.30	$90,215,887.08
46	$90,215,887.08	$656,012.04	$563,849.29	$92,162.74	$90,123,724.34
47	$90,123,724.34	$656,012.04	$563,273.28	$92,738.76	$90,030,985.58
48	$90,030,985.58	$656,012.04	$562,693.66	$93,318.38	$89,937,667.20
49	$89,937,667.20	$656,012.04	$562,110.42	$93,901.62	$89,843,765.58
50	$89,843,765.58	$656,012.04	$561,523.53	$94,488.50	$89,749,277.08
51	$89,749,277.08	$656,012.04	$560,932.98	$95,079.06	$89,654,198.02
52	$89,654,198.02	$656,012.04	$560,338.74	$95,673.30	$89,558,524.72
53	$89,558,524.72	$656,012.04	$559,740.78	$96,271.26	$89,462,253.46
54	$89,462,253.46	$656,012.04	$559,139.08	$96,872.95	$89,365,380.51

Mortgage Analysis

Month	Beg. Balance	Payment	int	prin	end balance
55	$89,365,380.51	$656,012.04	$558,533.63	$97,478.41	$89,267,902.10
56	$89,267,902.10	$656,012.04	$557,924.39	$98,087.65	$89,169,814.45
57	$89,169,814.45	$656,012.04	$557,311.34	$98,700.70	$89,071,113.75
58	$89,071,113.75	$656,012.04	$556,694.46	$99,317.58	$88,971,796.18
59	$88,971,796.18	$656,012.04	$556,073.73	$99,938.31	$88,871,857.86
60	$88,871,857.86	$656,012.04	$555,449.11	$100,562.93	$88,771,294.94
61	$88,771,294.94	$656,012.04	$554,820.59	$101,191.44	$88,670,103.49
62	$88,670,103.49	$656,012.04	$554,188.15	$101,823.89	$88,568,279.60
63	$88,568,279.60	$656,012.04	$553,551.75	$102,460.29	$88,465,819.31
64	$88,465,819.31	$656,012.04	$552,911.37	$103,100.67	$88,362,718.64
65	$88,362,718.64	$656,012.04	$552,266.99	$103,745.05	$88,258,973.60
66	$88,258,973.60	$656,012.04	$551,618.58	$104,393.45	$88,154,580.15
67	$88,154,580.15	$656,012.04	$550,966.13	$105,045.91	$88,049,534.23
68	$88,049,534.23	$656,012.04	$550,309.59	$105,702.45	$87,943,831.78
69	$87,943,831.78	$656,012.04	$549,648.95	$106,363.09	$87,837,468.69
70	$87,837,468.69	$656,012.04	$548,984.18	$107,027.86	$87,730,440.84
71	$87,730,440.84	$656,012.04	$548,315.26	$107,696.78	$87,622,744.05
72	$87,622,744.05	$656,012.04	$547,642.15	$108,369.89	$87,514,374.17
73	$87,514,374.17	$656,012.04	$546,964.84	$109,047.20	$87,405,326.97
74	$87,405,326.97	$656,012.04	$546,283.29	$109,728.74	$87,295,598.22
75	$87,295,598.22	$656,012.04	$545,597.49	$110,414.55	$87,185,183.67
76	$87,185,183.67	$656,012.04	$544,907.40	$111,104.64	$87,074,079.03
77	$87,074,079.03	$656,012.04	$544,212.99	$111,799.04	$86,962,279.99
78	$86,962,279.99	$656,012.04	$543,514.25	$112,497.79	$86,849,782.20
79	$86,849,782.20	$656,012.04	$542,811.14	$113,200.90	$86,736,581.30
80	$86,736,581.30	$656,012.04	$542,103.63	$113,908.40	$86,622,672.90
81	$86,622,672.90	$656,012.04	$541,391.71	$114,620.33	$86,508,052.56
82	$86,508,052.56	$656,012.04	$540,675.33	$115,336.71	$86,392,715.85
83	$86,392,715.85	$656,012.04	$539,954.47	$116,057.56	$86,276,658.29
84	$86,276,658.29	$656,012.04	$539,229.11	$116,782.92	$86,159,875.37
85	$86,159,875.37	$656,012.04	$538,499.22	$117,512.82	$86,042,362.55
86	$86,042,362.55	$656,012.04	$537,764.77	$118,247.27	$85,924,115.28
87	$85,924,115.28	$656,012.04	$537,025.72	$118,986.32	$85,805,128.96
88	$85,805,128.96	$656,012.04	$536,282.06	$119,729.98	$85,685,398.98
89	$85,685,398.98	$656,012.04	$535,533.74	$120,478.29	$85,564,920.68
90	$85,564,920.68	$656,012.04	$534,780.75	$121,231.28	$85,443,689.40
91	$85,443,689.40	$656,012.04	$534,023.06	$121,988.98	$85,321,700.42
92	$85,321,700.42	$656,012.04	$533,260.63	$122,751.41	$85,198,949.01
93	$85,198,949.01	$656,012.04	$532,493.43	$123,518.61	$85,075,430.40
94	$85,075,430.40	$656,012.04	$531,721.44	$124,290.60	$84,951,139.81
95	$84,951,139.81	$656,012.04	$530,944.62	$125,067.41	$84,826,072.39
96	$84,826,072.39	$656,012.04	$530,162.95	$125,849.09	$84,700,223.31
97	$84,700,223.31	$656,012.04	$529,376.40	$126,635.64	$84,573,587.66
98	$84,573,587.66	$656,012.04	$528,584.92	$127,427.12	$84,446,160.55
99	$84,446,160.55	$656,012.04	$527,788.50	$128,223.53	$84,317,937.01
100	$84,317,937.01	$656,012.04	$526,987.11	$129,024.93	$84,188,912.08
101	$84,188,912.08	$656,012.04	$526,180.70	$129,831.34	$84,059,080.74
102	$84,059,080.74	$656,012.04	$525,369.25	$130,642.78	$83,928,437.96
103	$83,928,437.96	$656,012.04	$524,552.74	$131,459.30	$83,796,978.66
104	$83,796,978.66	$656,012.04	$523,731.12	$132,280.92	$83,664,697.74
105	$83,664,697.74	$656,012.04	$522,904.36	$133,107.68	$83,531,590.06
106	$83,531,590.06	$656,012.04	$522,072.44	$133,939.60	$83,397,650.46
107	$83,397,650.46	$656,012.04	$521,235.32	$134,776.72	$83,262,873.74
108	$83,262,873.74	$656,012.04	$520,392.96	$135,619.08	$83,127,254.66
109	$83,127,254.66	$656,012.04	$519,545.34	$136,466.70	$82,990,787.97
110	$82,990,787.97	$656,012.04	$518,692.42	$137,319.61	$82,853,468.35
111	$82,853,468.35	$656,012.04	$517,834.18	$138,177.86	$82,715,290.49
112	$82,715,290.49	$656,012.04	$516,970.57	$139,041.47	$82,576,249.02
113	$82,576,249.02	$656,012.04	$516,101.56	$139,910.48	$82,436,338.54
114	$82,436,338.54	$656,012.04	$515,227.12	$140,784.92	$82,295,553.62
115	$82,295,553.62	$656,012.04	$514,347.21	$141,664.83	$82,153,888.79
116	$82,153,888.79	$656,012.04	$513,461.80	$142,550.23	$82,011,338.55
117	$82,011,338.55	$656,012.04	$512,570.87	$143,441.17	$81,867,897.38
118	$81,867,897.38	$656,012.04	$511,674.36	$144,337.68	$81,723,559.70
119	$81,723,559.70	$656,012.04	$510,772.25	$145,239.79	$81,578,319.91
120	**$81,578,319.91**	$656,012.04	$509,864.50	**$146,147.54**	**$81,432,172.37**

Mortgage Analysis

Resi Only Scenario

Max Loan

Stabilized NOI (Yr 3)	$10,285,118	Stabilized CF After Lease Before Debt		$7,261,978
Cap Rate	5.5%	Minimum DSCR		1.20
Implied Value	$187,002,149	Annual Pmt		$6,051,648
LTV	75%	Rate	6.50%	
		Amortization	30	years
		Term	10	years
Max Loan	$140,251,612	Max Loan		$79,786,348.59

Development Cost[1]	$107,681,737		Note: 1. Excluding Land Value
Mortgage	$79,786,349		
Equity	$27,895,389		
Rate	6.50%		
Amortization	30	years	
Term	10	years	
Monthly Payment	($504,304.00)		

Mortgage Analysis

Resi Only Scenario

Amortization Schedule

Month	Beg. Balance	Payment	int	prin	end balance
1	$79,786,348.59	$504,304.00	$432,176.05	$72,127.94	$79,714,220.65
2	$79,714,220.65	$504,304.00	$431,785.36	$72,518.63	$79,641,702.02
3	$79,641,702.02	$504,304.00	$431,392.55	$72,911.44	$79,568,790.57
4	$79,568,790.57	$504,304.00	$430,997.62	$73,306.38	$79,495,484.19
5	$79,495,484.19	$504,304.00	$430,600.54	$73,703.46	$79,421,780.73
6	$79,421,780.73	$504,304.00	$430,201.31	$74,102.68	$79,347,678.05
7	$79,347,678.05	$504,304.00	$429,799.92	$74,504.07	$79,273,173.98
8	$79,273,173.98	$504,304.00	$429,396.36	$74,907.64	$79,198,266.34
9	$79,198,266.34	$504,304.00	$428,990.61	$75,313.39	$79,122,952.95
10	$79,122,952.95	$504,304.00	$428,582.66	$75,721.33	$79,047,231.62
11	$79,047,231.62	$504,304.00	$428,172.50	$76,131.49	$78,971,100.12
12	$78,971,100.12	$504,304.00	$427,760.13	$76,543.87	$78,894,556.25
13	$78,894,556.25	$504,304.00	$427,345.51	$76,958.48	$78,817,597.77
14	$78,817,597.77	$504,304.00	$426,928.65	$77,375.34	$78,740,222.43
15	$78,740,222.43	$504,304.00	$426,509.54	$77,794.46	$78,662,427.97
16	$78,662,427.97	$504,304.00	$426,088.15	$78,215.85	$78,584,212.12
17	$78,584,212.12	$504,304.00	$425,664.48	$78,639.51	$78,505,572.61
18	$78,505,572.61	$504,304.00	$425,238.52	$79,065.48	$78,426,507.13
19	$78,426,507.13	$504,304.00	$424,810.25	$79,493.75	$78,347,013.38
20	$78,347,013.38	$504,304.00	$424,379.66	$79,924.34	$78,267,089.04
21	$78,267,089.04	$504,304.00	$423,946.73	$80,357.26	$78,186,731.78
22	$78,186,731.78	$504,304.00	$423,511.46	$80,792.53	$78,105,939.24
23	$78,105,939.24	$504,304.00	$423,073.84	$81,230.16	$78,024,709.09
24	$78,024,709.09	$504,304.00	$422,633.84	$81,670.16	$77,943,038.93
25	$77,943,038.93	$504,304.00	$422,191.46	$82,112.54	$77,860,926.39
26	$77,860,926.39	$504,304.00	$421,746.68	$82,557.31	$77,778,369.08
27	$77,778,369.08	$504,304.00	$421,299.50	$83,004.50	$77,695,364.59
28	$77,695,364.59	$504,304.00	$420,849.89	$83,454.11	$77,611,910.48
29	$77,611,910.48	$504,304.00	$420,397.85	$83,906.15	$77,528,004.33
30	$77,528,004.33	$504,304.00	$419,943.36	$84,360.64	$77,443,643.69
31	$77,443,643.69	$504,304.00	$419,486.40	$84,817.59	$77,358,826.10
32	$77,358,826.10	$504,304.00	$419,026.97	$85,277.02	$77,273,549.08
33	$77,273,549.08	$504,304.00	$418,565.06	$85,738.94	$77,187,810.14
34	$77,187,810.14	$504,304.00	$418,100.64	$86,203.36	$77,101,606.78
35	$77,101,606.78	$504,304.00	$417,633.70	$86,670.29	$77,014,936.49
36	$77,014,936.49	$504,304.00	$417,164.24	$87,139.76	$76,927,796.73
37	$76,927,796.73	$504,304.00	$416,692.23	$87,611.76	$76,840,184.96
38	$76,840,184.96	$504,304.00	$416,217.67	$88,086.33	$76,752,098.64
39	$76,752,098.64	$504,304.00	$415,740.53	$88,563.46	$76,663,535.17
40	$76,663,535.17	$504,304.00	$415,260.82	$89,043.18	$76,574,491.99
41	$76,574,491.99	$504,304.00	$414,778.50	$89,525.50	$76,484,966.50
42	$76,484,966.50	$504,304.00	$414,293.57	$90,010.43	$76,394,956.07
43	$76,394,956.07	$504,304.00	$413,806.01	$90,497.98	$76,304,458.08
44	$76,304,458.08	$504,304.00	$413,315.81	$90,988.18	$76,213,469.90
45	$76,213,469.90	$504,304.00	$412,822.96	$91,481.03	$76,121,988.87
46	$76,121,988.87	$504,304.00	$412,327.44	$91,976.56	$76,030,012.31
47	$76,030,012.31	$504,304.00	$411,829.23	$92,474.76	$75,937,537.55
48	$75,937,537.55	$504,304.00	$411,328.33	$92,975.67	$75,844,561.88
49	$75,844,561.88	$504,304.00	$410,824.71	$93,479.29	$75,751,082.59
50	$75,751,082.59	$504,304.00	$410,318.36	$93,985.63	$75,657,096.96
51	$75,657,096.96	$504,304.00	$409,809.28	$94,494.72	$75,562,602.24
52	$75,562,602.24	$504,304.00	$409,297.43	$95,006.57	$75,467,595.67
53	$75,467,595.67	$504,304.00	$408,782.81	$95,521.19	$75,372,074.48
54	$75,372,074.48	$504,304.00	$408,265.40	$96,038.59	$75,276,035.89

Mortgage Analysis

Month	Beg. Balance	Payment	int	prin	end balance
55	$75,276,035.89	$504,304.00	$407,745.19	$96,558.80	$75,179,477.09
56	$75,179,477.09	$504,304.00	$407,222.17	$97,081.83	$75,082,395.26
57	$75,082,395.26	$504,304.00	$406,696.31	$97,607.69	$74,984,787.57
58	$74,984,787.57	$504,304.00	$406,167.60	$98,136.40	$74,886,651.17
59	$74,886,651.17	$504,304.00	$405,636.03	$98,667.97	$74,787,983.20
60	$74,787,983.20	$504,304.00	$405,101.58	$99,202.42	$74,688,780.78
61	$74,688,780.78	$504,304.00	$404,564.23	$99,739.77	$74,589,041.02
62	$74,589,041.02	$504,304.00	$404,023.97	$100,280.02	$74,488,760.99
63	$74,488,760.99	$504,304.00	$403,480.79	$100,823.21	$74,387,937.78
64	$74,387,937.78	$504,304.00	$402,934.66	$101,369.33	$74,286,568.45
65	$74,286,568.45	$504,304.00	$402,385.58	$101,918.42	$74,184,650.03
66	$74,184,650.03	$504,304.00	$401,833.52	$102,470.48	$74,082,179.56
67	$74,082,179.56	$504,304.00	$401,278.47	$103,025.52	$73,979,154.03
68	$73,979,154.03	$504,304.00	$400,720.42	$103,583.58	$73,875,570.45
69	$73,875,570.45	$504,304.00	$400,159.34	$104,144.66	$73,771,425.80
70	$73,771,425.80	$504,304.00	$399,595.22	$104,708.77	$73,666,717.02
71	$73,666,717.02	$504,304.00	$399,028.05	$105,275.95	$73,561,441.08
72	$73,561,441.08	$504,304.00	$398,457.81	$105,846.19	$73,455,594.89
73	$73,455,594.89	$504,304.00	$397,884.47	$106,419.52	$73,349,175.36
74	$73,349,175.36	$504,304.00	$397,308.03	$106,995.96	$73,242,179.40
75	$73,242,179.40	$504,304.00	$396,728.47	$107,575.52	$73,134,603.87
76	$73,134,603.87	$504,304.00	$396,145.77	$108,158.23	$73,026,445.65
77	$73,026,445.65	$504,304.00	$395,559.91	$108,744.08	$72,917,701.57
78	$72,917,701.57	$504,304.00	$394,970.88	$109,333.11	$72,808,368.45
79	$72,808,368.45	$504,304.00	$394,378.66	$109,925.33	$72,698,443.12
80	$72,698,443.12	$504,304.00	$393,783.23	$110,520.76	$72,587,922.36
81	$72,587,922.36	$504,304.00	$393,184.58	$111,119.42	$72,476,802.94
82	$72,476,802.94	$504,304.00	$392,582.68	$111,721.31	$72,365,081.62
83	$72,365,081.62	$504,304.00	$391,977.53	$112,326.47	$72,252,755.15
84	$72,252,755.15	$504,304.00	$391,369.09	$112,934.91	$72,139,820.25
85	$72,139,820.25	$504,304.00	$390,757.36	$113,546.64	$72,026,273.61
86	$72,026,273.61	$504,304.00	$390,142.32	$114,161.68	$71,912,111.93
87	$71,912,111.93	$504,304.00	$389,523.94	$114,780.06	$71,797,331.87
88	$71,797,331.87	$504,304.00	$388,902.21	$115,401.78	$71,681,930.09
89	$71,681,930.09	$504,304.00	$388,277.12	$116,026.88	$71,565,903.21
90	$71,565,903.21	$504,304.00	$387,648.64	$116,655.35	$71,449,247.86
91	$71,449,247.86	$504,304.00	$387,016.76	$117,287.24	$71,331,960.62
92	$71,331,960.62	$504,304.00	$386,381.45	$117,922.54	$71,214,038.08
93	$71,214,038.08	$504,304.00	$385,742.71	$118,561.29	$71,095,476.79
94	$71,095,476.79	$504,304.00	$385,100.50	$119,203.50	$70,976,273.29
95	$70,976,273.29	$504,304.00	$384,454.81	$119,849.18	$70,856,424.11
96	$70,856,424.11	$504,304.00	$383,805.63	$120,498.37	$70,735,925.74
97	$70,735,925.74	$504,304.00	$383,152.93	$121,151.07	$70,614,774.68
98	$70,614,774.68	$504,304.00	$382,496.70	$121,807.30	$70,492,967.38
99	$70,492,967.38	$504,304.00	$381,836.91	$122,467.09	$70,370,500.29
100	$70,370,500.29	$504,304.00	$381,173.54	$123,130.45	$70,247,369.83
101	$70,247,369.83	$504,304.00	$380,506.59	$123,797.41	$70,123,572.42
102	$70,123,572.42	$504,304.00	$379,836.02	$124,467.98	$69,999,104.45
103	$69,999,104.45	$504,304.00	$379,161.82	$125,142.18	$69,873,962.26
104	$69,873,962.26	$504,304.00	$378,483.96	$125,820.03	$69,748,142.23
105	$69,748,142.23	$504,304.00	$377,802.44	$126,501.56	$69,621,640.67
106	$69,621,640.67	$504,304.00	$377,117.22	$127,186.78	$69,494,453.89
107	$69,494,453.89	$504,304.00	$376,428.29	$127,875.70	$69,366,578.19
108	$69,366,578.19	$504,304.00	$375,735.63	$128,568.36	$69,238,009.83
109	$69,238,009.83	$504,304.00	$375,039.22	$129,264.78	$69,108,745.05
110	$69,108,745.05	$504,304.00	$374,339.04	$129,964.96	$68,978,780.09
111	$68,978,780.09	$504,304.00	$373,635.06	$130,668.94	$68,848,111.15
112	$68,848,111.15	$504,304.00	$372,927.27	$131,376.73	$68,716,734.42
113	$68,716,734.42	$504,304.00	$372,215.64	$132,088.35	$68,584,646.07
114	$68,584,646.07	$504,304.00	$371,500.17	$132,803.83	$68,451,842.24
115	$68,451,842.24	$504,304.00	$370,780.81	$133,523.18	$68,318,319.06
116	$68,318,319.06	$504,304.00	$370,057.56	$134,246.44	$68,184,072.62
117	$68,184,072.62	$504,304.00	$369,330.39	$134,973.60	$68,049,099.02
118	$68,049,099.02	$504,304.00	$368,599.29	$135,704.71	$67,913,394.31
119	$67,913,394.31	$504,304.00	$367,864.22	$136,439.78	$67,776,954.53
120	**$67,776,954.53**	$504,304.00	$367,125.17	**$137,178.83**	**$67,639,775.70**

Rent Roll Analysis

Floorplate	70,000 sf
Escalation	2.50%

FLOOR 1

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Grocery Base Rent[1]	$36.75	$36.75	$37.67	$38.61	$39.58	$40.57	$41.58	$42.62	$43.68	$44.78	$45.90
Total Grocery Store Rent	54,600 sf	$2,006,550	$2,056,714	$2,108,132	$2,160,835	$2,214,856	$2,270,227	$2,326,983	$2,385,157	$2,444,786	$2,505,906
Retail Base Rent[2]	15,400 sf	$55.32	$56.71	$58.13	$59.58	$61.07	$62.59	$64.16	$65.76	$67.41	$69.09
Retail #1	2,200 sf	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Retail #2	2,200 sf	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Retail #3	2,200 sf	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Retail #4	2,200 sf	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Retail #5	2,200 sf	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Retail #6	2,200 sf	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
Retail #7	2,200 sf	$121,714	$124,757	$127,876	$131,073	$134,349	$137,708	$141,151	$144,680	$148,297	$152,004
TOTAL RETAIL RENT		$851,997	$873,297	$895,130	$917,508	$940,446	$963,957	$988,056	$1,012,757	$1,038,076	$1,064,028

Floors 2-8

Gross Residential Square Footage	480,027 sf
Core Factor	15.5%
Residential Core	74,404 sf
Net Residential Square Footage	415,608
Total Apartments	425

UNIT MIX	Per. of Bldg	Number of Units	Size[3] (sf)	Base Rent[4]	Unit Rent	Monthly Rent	Annual Rent
Studio/ JR 1BR	20.0%	85	560	$3.48	$1,946.28	$165,433.80	$1,985,205.60
1BR	30.0%	128	892	$3.23	$2,884.73	$367,802.82	$4,413,633.84
2BR	45.0%	191	1,146	$3.05	$3,489.57	$667,380.26	$8,008,563.15
3BR	5.0%	21	1,652	$3.42	$5,654.80	$120,164.42	$1,441,972.98
Total Building	100.0%	425	415,608		$13,975	$1,320,781	$15,849,376
Average Unit			978	$3.18	$3,108		

Rent Roll Analysis

Residential			2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TOTAL RESIDENTIAL RENT			$15,849,376	$16,245,610	$16,651,750	$17,068,044	$17,494,745	$17,932,114	$18,380,417	$18,839,927	$19,310,925	$19,793,698

Parking

Base Monthly Residential Parking Income[5]	$227.85		$227.85	$233.55	$239.38	$245.37	$251.50	$257.79	$264.24	$270.84	$277.61	$284.55
Base Retail Parking Income	$0.00		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Residential Parking	142	spots	$388,256	$397,963	$407,912	$418,110	$428,562	$439,276	$450,258	$461,515	$473,053	$484,879
Retail Parking	90	spots	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
TOTAL PARKING INCOME			$388,256	$397,963	$407,912	$418,110	$428,562	$439,276	$450,258	$461,515	$473,053	$484,879

ABSORPTION

Monthly Absorption[6] 17 month
Average Monthly Rent $3,108

Absorption Loss
Absorption Schedule
Monthly Unrented Apts

Month	Vacant Apts	Loss	Month	Vacant Apts	Loss
1	408	$1,267,950	13	204	$633,975
2	391	$1,215,119	14	187	$581,144
3	374	$1,162,288	15	170	$528,313
4	357	$1,109,456	16	153	$475,481
5	340	$1,056,625	17	136	$422,650
6	323	$1,003,794	18	119	$369,819
7	306	$950,963	19	102	$316,988
8	289	$898,131	20	85	$264,156
9	272	$845,300	21	68	$211,325
10	255	$792,469	22	51	$158,494
11	238	$739,638	23	34	$105,663
12	221	$686,806	24	17	$52,831
		$11,728,538			$4,120,838

CONCESSIONS LOSS
Concessions = 1 free month
Monthly Concession Loss per Apartment $3,108
Monthly Newly Rented Apts 17

Month	Apts Rented	Loss	Month	Apts Rented	Loss
1	17	$52,831	13	17	$52,831
2	17	$52,831	14	17	$52,831
3	17	$52,831	15	17	$52,831
4	17	$52,831	16	17	$52,831
5	17	$52,831	17	17	$52,831
6	17	$52,831	18	17	$52,831
7	17	$52,831	19	17	$52,831
8	17	$52,831	20	17	$52,831
9	17	$52,831	21	17	$52,831
10	17	$52,831	22	17	$52,831
11	17	$52,831	23	17	$52,831
12	17	$52,831	24	17	$52,831
		$633,975			$633,975

Notes:
1 - Per TrendLines Report 2008 ave NoVA (DC tends to be higher)
2 - Average comparable rent escalated two years at CPI
3 - Per average comparable study
4 - Per average comparable study
5 - Per average comparable study

DCF Main Scenario

		2011		2012		2013		2014		2015	
		Sq Ft	**Annual**	**Sq Ft**	**Annual**	**Sq Ft**	**Annual**	**Sq Ft**	**Annual**	**Sq Ft**	**Annual**
Potential Gross Income											
Grocery Store		$ 36.75	$ 2,006,550	$ 37.67	$ 2,056,714	$ 38.61	$ 2,108,132	$ 39.58	$ 2,160,835	$ 40.57	$ 2,214,856
Retail		$ 55.32	$ 851,997	$ 56.71	$ 873,297	$ 58.13	$ 895,130	$ 59.58	$ 917,508	$ 61.07	$ 940,446
Residential		$ 33.02	$ 15,849,376	$ 33.84	$ 16,245,610	$ 34.69	$ 16,651,750	$ 35.56	$ 17,068,044	$ 36.45	$ 17,494,745
Parking Income			$ -		$ -		$ -		$ -		$ -
Less Absorption and Concessions Loss			$ (12,362,513)		$ (4,754,813)		$ -				
Less Retail Tenant Leaseup/Rollover		50.0%	$ (425,999)	25.0%	$ (218,324)	10.0%	$ (89,513)	10.0%	$ (91,751)	10.0%	$ (94,045)
Gross Income		$ 10.76	$ 5,919,411	$ 25.82	$ 14,202,484	$ 35.57	$ 19,565,498	$ 36.46	$ 20,054,636	$ 37.37	$ 20,556,002
Residential Losses											
Vacancy		5.0%	$ (174,343)	5.0%	$ (574,540)	5.0%	$ (832,588)	5.0%	$ (853,402)	5.0%	$ (874,737)
Collection Loss		1.0%	$ (34,869)	1.0%	$ (114,908)	1.0%	$ (166,518)	1.0%	$ (170,680)	1.0%	$ (174,947)
Effective Gross Income		**$ 10.38**	**$ 5,710,200**	**$ 24.57**	**$ 13,513,036**	**$ 33.76**	**$ 18,566,393**	**$ 34.60**	**$ 19,030,553**	**$ 35.46**	**$ 19,506,317**
Operating Expenses											
Property Taxes			$ (1,122,561)		$ (1,150,625)		$ (1,179,391)		$ (1,208,875)		$ (1,239,097)
Operating Expenses Residential	27.0%	$ 2,215.18	$ (941,453)	$ 7,300.04	$ (3,102,515)	$ 10,578.76	$ (4,495,973)	$ 10,843.23	$ (4,608,372)	$ 11,114.31	$ (4,723,581)
Total Operating Expenses		$ 3.75	$ (2,064,014)	$ 7.73	$ (4,253,140)	$ 10.32	$ (5,675,363)	$ 10.58	$ (5,817,247)	$ 10.84	$ (5,962,679)
Net Operating Income		**$ 6.63**	**$ 3,646,186**	**$ 16.84**	**$ 9,259,896**	**$ 23.44**	**$ 12,891,030**	**$ 24.02**	**$ 13,213,306**	**$ 24.62**	**$ 13,543,639**
Other Deductions											
Capital Reserves[1]		$ 300.00	$ 127,500	$ 307.50	$ 130,688	$ 315.19	$ 133,955	$ 323.07	$ 137,304	$ 331.14	$ 140,736
Total Other Deductions		$ 0.23	$ 127,500	$ 0.24	$ 130,688	$ 0.24	$ 133,955	$ 0.25	$ 137,304	$ 0.26	$ 140,736
Cash Flow Before Ground Lease		**$ 6.40**	**$ 3,518,686**	**$ 16.60**	**$ 9,129,208**	**$ 23.19**	**$ 12,757,076**	**$ 23.77**	**$ 13,076,002**	**$ 24.37**	**$ 13,402,902**
Ground Lease Payment			$ (3,310,502)		$ (3,310,502)		$ (3,310,502)		$ (3,310,502)		$ (3,310,502)
Cash Flow After Lease Before Debt			$ 208,183		$ 5,818,706		$ 9,446,573		$ 9,765,500		$ 10,092,400
Debt Service			$ (7,872,144)		$ (7,872,144)		$ (7,872,144)		$ (7,872,144)		$ (7,872,144)
DSCR			0.03		0.74		1.20		1.24		1.28
Net Cash Flow After Debt Service			**$ (7,663,961)**		**$ (2,053,438)**		**$ 1,574,429**		**$ 1,893,356**		**$ 2,220,256**

DCF Main Scenario

Calculation of Reversion Value		
Terminal Net Operating Income	$ 15,323,384	
Going-In Cap Rate	5.50%	
Terminal Capitalization Rate	6.50%	
Anticipated Value in 2020	$ 235,744,369	
Mortgage Pay-Off	$ 87,987,617	
Deed and Transfer Taxes	$ 6,836,587	2.90%
Seller's Commission	$ 7,072,331	3.00%
Net Proceeds at Sale	$ 133,847,834	

LEVERED IRR		**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Net Cash Flow After Debt Service		$ (7,663,961)	$ (2,053,438)	$ 1,574,429	$ 1,893,356	$ 2,220,256	$ 2,555,328	$ 2,898,778	$ 3,250,813	$ 3,611,650	$ 3,981,507
Proceeds from Sale (Reversion)											$ 133,847,834
Total Cash Flow	($ 32,605,466)	$ (7,663,961)	$ (2,053,438)	$ 1,574,429	$ 1,893,356	$ 2,220,256	$ 2,555,328	$ 2,898,778	$ 3,250,813	$ 3,611,650	$ 137,829,341
Discount Rate		13.0%									
Net Present Value of Cash Flows		$ 7,034,614									
Levered IRR		**15.23%**									

UNLEVERED IRR		**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Net Cash Flow After Ground Lease		$ 208,183	$ 5,818,706	$ 9,446,573	$ 9,765,500	$ 10,092,400	$ 10,427,473	$ 10,770,922	$ 11,122,958	$ 11,483,794	$ 11,853,652
Proceeds from Sale (Reversion)											$ 221,835,451
Total Cash Flow	($ 136,393,668)	$ 208,183	$ 5,818,706	$ 9,446,573	$ 9,765,500	$ 10,092,400	$ 10,427,473	$ 10,770,922	$ 11,122,958	$ 11,483,794	$ 233,689,103
Discount Rate		13.0%									
Net Present Value of Cash Flows		($ 24,073,265)									
Unlevered IRR		**10.02%**									

RETURN ON COST (Stabilized)	
Total Development Cost (inc. land)	$ 191,146,334
Stabilized NOI (Year 3)	$ 12,891,030
Return on Cost	**6.74%**

Other Assumptions/Conditions	
Building Size	550,027
CPI	2.50%
Property Taxes and OpEx Escalation	2.50%

DCF Main Scenario

2016		2017		2018		2019		2020	
Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual
$ 41.58	$ 2,270,227	$ 42.62	$ 2,326,983	$ 43.68	$ 2,385,157	$ 44.78	$ 2,444,786	$ 45.90	$ 2,505,906
$ 62.59	$ 963,957	$ 64.16	$ 988,056	$ 65.76	$ 1,012,757	$ 67.41	$ 1,038,076	$ 69.09	$ 1,064,028
$ 37.36	$ 17,932,114	$ 38.29	$ 18,380,417	$ 39.25	$ 18,839,927	$ 40.23	$ 19,310,925	$ 41.23	$ 19,793,698
	$ -		$ -		$ -		$ -		$ -
10.0%	$ (96,396)	10.0%	$ (98,806)	10.0%	$ (101,276)	10.0%	$ (103,808)	10.0%	$ (106,403)
$ 38.31	$ 21,069,902	$ 39.26	$ 21,596,649	$ 40.25	$ 22,136,566	$ 41.25	$ 22,689,980	$ 42.28	$ 23,257,229
5.0%	$ (896,606)	5.0%	$ (919,021)	5.0%	$ (941,996)	5.0%	$ (965,546)	5.0%	$ (989,685)
1.0%	$ (179,321)	1.0%	$ (183,804)	1.0%	$ (188,399)	1.0%	$ (193,109)	1.0%	$ (197,937)
$ 36.35	**$ 19,993,975**	**$ 37.26**	**$ 20,493,824**	**$ 38.19**	**$ 21,006,170**	**$ 39.15**	**$ 21,531,324**	**$ 40.12**	**$ 22,069,607**
	$ (1,270,075)		$ (1,301,827)		$ (1,334,372)		$ (1,367,732)		$ (1,401,925)
$ 11,392.17	$ (4,841,671)	$ 11,676.97	$ (4,962,712)	$ 11,968.89	$ (5,086,780)	$ 12,268.12	$ (5,213,950)	$ 12,574.82	$ (5,344,299)
$ 11.11	$ (6,111,745)	$ 11.39	$ (6,264,539)	$ 11.67	$ (6,421,153)	$ 11.97	$ (6,581,681)	$ 12.27	$ (6,746,223)
$ 25.24	**$ 13,882,230**	**$ 25.87**	**$ 14,229,285**	**$ 26.52**	**$ 14,585,017**	**$ 27.18**	**$ 14,949,643**	**$ 27.86**	**$ 15,323,384**
$ 339.42	$ 144,255	$ 347.91	$ 147,861	$ 356.61	$ 151,557	$ 365.52	$ 155,346	$ 374.66	$ 159,230
$ 0.26	$ 144,255	$ 0.27	$ 147,861	$ 0.28	$ 151,557	$ 0.28	$ 155,346	$ 0.29	$ 159,230
$ 24.98	**$ 13,737,975**	**$ 25.60**	**$ 14,081,424**	**$ 26.24**	**$ 14,433,460**	**$ 26.90**	**$ 14,794,297**	**$ 27.57**	**$ 15,164,154**
	$ (3,310,502)		$ (3,310,502)		$ (3,310,502)		$ (3,310,502)		$ (3,310,502)
	$ 10,427,473		$ 10,770,922		$ 11,122,958		$ 11,483,794		$ 11,853,652
	$ (7,872,144)		$ (7,872,144)		$ (7,872,144)		$ (7,872,144)		$ (7,872,144)
	1.32		1.37		1.41		1.46		1.51
	$ 2,555,328		**$ 2,898,778**		**$ 3,250,813**		**$ 3,611,650**		**$ 3,981,507**

DCF @ 7.0% Scenario

		2011		2012		2013		2014		2015	
Potential Gross Income		Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual
Grocery Store		$ 36.75	$ 2,006,550	$ 37.67	$ 2,056,714	$ 38.61	$ 2,108,132	$ 39.58	$ 2,160,835	$ 40.57	$ 2,214,856
Retail		$ 55.32	$ 851,997	$ 56.71	$ 873,297	$ 58.13	$ 895,130	$ 59.58	$ 917,508	$ 61.07	$ 940,446
Residential		$ 33.02	$ 15,849,376	$ 33.84	$ 16,245,610	$ 34.69	$ 16,651,750	$ 35.56	$ 17,068,044	$ 36.45	$ 17,494,745
Parking Income			$ -		$ -		$ -		$ -		$ -
Less Absorption and Concessions Loss			$ (12,362,513)		$ (4,754,813)		$ -				
Less Retail Tenant Leaseup/Rollover		50.0%	$ (425,999)	25.0%	$ (218,324)	10.0%	$ (89,513)	10.0%	$ (91,751)	10.0%	$ (94,045)
Gross Income		$ 10.76	$ 5,919,411	$ 25.82	$ 14,202,484	$ 35.57	$ 19,565,498	$ 36.46	$ 20,054,636	$ 37.37	$ 20,556,002
Residential Losses											
Vacancy		5.0%	$ (174,343)	5.0%	$ (574,540)	5.0%	$ (832,588)	5.0%	$ (853,402)	5.0%	$ (874,737)
Collection Loss		1.0%	$ (34,869)	1.0%	$ (114,908)	1.0%	$ (166,518)	1.0%	$ (170,680)	1.0%	$ (174,947)
Effective Gross Income		**$ 10.38**	**$ 5,710,200**	**$ 24.57**	**$ 13,513,036**	**$ 33.76**	**$ 18,566,393**	**$ 34.60**	**$ 19,030,553**	**$ 35.46**	**$ 19,506,317**
Operating Expenses											
Property Taxes			$ (1,122,561)		$ (1,150,625)		$ (1,179,391)		$ (1,208,875)		$ (1,239,097)
Operating Expenses Residential	27.0%	$ 2,215.18	$ (941,453)	$ 7,300.04	$ (3,102,515)	$ 10,578.76	$ (4,495,973)	$ 10,843.23	$ (4,608,372)	$ 11,114.31	$ (4,723,581)
Total Operating Expenses		$ 3.75	$ (2,064,014)	$ 7.73	$ (4,253,140)	$ 10.32	$ (5,675,363)	$ 10.58	$ (5,817,247)	$ 10.84	$ (5,962,679)
Net Operating Income		**$ 6.63**	**$ 3,646,186**	**$ 16.84**	**$ 9,259,896**	**$ 23.44**	**$ 12,891,030**	**$ 24.02**	**$ 13,213,306**	**$ 24.62**	**$ 13,543,639**
Other Deductions											
Capital Reserves		$ 300.00	$ 127,500	$ 307.50	$ 130,688	$ 315.19	$ 133,955	$ 323.07	$ 137,304	$ 331.14	$ 140,736
Total Other Deductions		$ 0.23	$ 127,500	$ 0.24	$ 130,688	$ 0.24	$ 133,955	$ 0.25	$ 137,304	$ 0.26	$ 140,736
Cash Flow Before Ground Lease		**$ 6.40**	**$ 3,518,686**	**$ 16.60**	**$ 9,129,208**	**$ 23.19**	**$ 12,757,076**	**$ 23.77**	**$ 13,076,002**	**$ 24.37**	**$ 13,402,902**
Ground Lease Payment			$ (3,310,502)		$ (3,310,502)		$ (3,310,502)		$ (3,310,502)		$ (3,310,502)
Cash Flow After Lease Before Debt			$ 208,183		$ 5,818,706		$ 9,446,573		$ 9,765,500		$ 10,092,400
Debt Service			$ (7,872,144)		$ (7,872,144)		$ (7,872,144)		$ (7,872,144)		$ (7,872,144)
DSCR			0.03		0.74		1.20		1.24		1.28
Net Cash Flow After Debt Service			**$ (7,663,961)**		**$ (2,053,438)**		**$ 1,574,429**		**$ 1,893,356**		**$ 2,220,256**

DCF @ 7.0% Scenario

Calculation of Reversion Value

Terminal Net Operating Income	$ 15,323,384	
Going-In Cap Rate	5.50%	
Terminal Capitalization Rate	6.50%	
Anticipated Value in 2020	$ 235,744,369	
Mortgage Pay-Off	$ 84,614,077	
Deed and Transfer Taxes	$ 6,836,587	2.90%
Seller's Commission	$ 7,072,331	3.00%
Net Proceeds at Sale	$ 137,221,374	

LEVERED IRR		**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Net Cash Flow After Debt Service		$ (7,663,961)	$ (2,053,438)	$ 1,574,429	$ 1,893,356	$ 2,220,256	$ 2,555,328	$ 2,898,778	$ 3,250,813	$ 3,611,650	$ 3,981,507
Proceeds from Sale (Reversion)											$ 137,221,374
Total Cash Flow	($ 37,790,094)	$ (7,663,961)	$ (2,053,438)	$ 1,574,429	$ 1,893,356	$ 2,220,256	$ 2,555,328	$ 2,898,778	$ 3,250,813	$ 3,611,650	$ 141,202,881
Discount Rate		13.0%									
Net Present Value of Cash Flows		$ 3,325,921									
Levered IRR		**13.97%**									

UNLEVERED IRR		**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Net Cash Flow After Ground Lease		$ 208,183	$ 5,818,706	$ 9,446,573	$ 9,765,500	$ 10,092,400	$ 10,427,473	$ 10,770,922	$ 11,122,958	$ 11,483,794	$ 11,853,652
Proceeds from Sale (Reversion)											$ 221,835,451
Total Cash Flow	($ 136,393,668)	$ 208,183	$ 5,818,706	$ 9,446,573	$ 9,765,500	$ 10,092,400	$ 10,427,473	$ 10,770,922	$ 11,122,958	$ 11,483,794	$ 233,689,103
Discount Rate		13.0%									
Net Present Value of Cash Flows		($ 24,073,265)									
Unlevered IRR		**10.02%**									

RETURN ON COST (Stabilized)	
Total Development Cost (inc. land)	$ 191,146,334
Stabilized NOI (Year 3)	$ 12,891,030
Return on Cost	**6.74%**

Other Assumptions/Conditions	
Building Size	550,027
CPI	2.50%
Property Taxes and OpEx Escalation	2.50%

DCF @ 7.0% Scenario

2016		2017		2018		2019		2020	
Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual
$ 41.58	$ 2,270,227	$ 42.62	$ 2,326,983	$ 43.68	$ 2,385,157	$ 44.78	$ 2,444,786	$ 45.90	$ 2,505,906
$ 62.59	$ 963,957	$ 64.16	$ 988,056	$ 65.76	$ 1,012,757	$ 67.41	$ 1,038,076	$ 69.09	$ 1,064,028
$ 37.36	$ 17,932,114	$ 38.29	$ 18,380,417	$ 39.25	$ 18,839,927	$ 40.23	$ 19,310,925	$ 41.23	$ 19,793,698
	$ -		$ -		$ -		$ -		$ -
10.0%	$ (96,396)	10.0%	$ (98,806)	10.0%	$ (101,276)	10.0%	$ (103,808)	10.0%	$ (106,403)
$ 38.31	$ 21,069,902	$ 39.26	$ 21,596,649	$ 40.25	$ 22,136,566	$ 41.25	$ 22,689,980	$ 42.28	$ 23,257,229
5.0%	$ (896,606)	5.0%	$ (919,021)	5.0%	$ (941,996)	5.0%	$ (965,546)	5.0%	$ (989,685)
1.0%	$ (179,321)	1.0%	$ (183,804)	1.0%	$ (188,399)	1.0%	$ (193,109)	1.0%	$ (197,937)
$ 36.35	**$ 19,993,975**	**$ 37.26**	**$ 20,493,824**	**$ 38.19**	**$ 21,006,170**	**$ 39.15**	**$ 21,531,324**	**$ 40.12**	**$ 22,069,607**
	$ (1,270,075)		$ (1,301,827)		$ (1,334,372)		$ (1,367,732)		$ (1,401,925)
$ 11,392.17	$ (4,841,671)	$ 11,676.97	$ (4,962,712)	$ 11,968.89	$ (5,086,780)	$ 12,268.12	$ (5,213,950)	$ 12,574.82	$ (5,344,299)
$ 11.11	$ (6,111,745)	$ 11.39	$ (6,264,539)	$ 11.67	$ (6,421,153)	$ 11.97	$ (6,581,681)	$ 12.27	$ (6,746,223)
$ 25.24	**$ 13,882,230**	**$ 25.87**	**$ 14,229,285**	**$ 26.52**	**$ 14,585,017**	**$ 27.18**	**$ 14,949,643**	**$ 27.86**	**$ 15,323,384**
$ 339.42	$ 144,255	$ 347.91	$ 147,861	$ 356.61	$ 151,557	$ 365.52	$ 155,346	$ 374.66	$ 159,230
$ 0.26	$ 144,255	$ 0.27	$ 147,861	$ 0.28	$ 151,557	$ 0.28	$ 155,346	$ 0.29	$ 159,230
$ 24.98	**$ 13,737,975**	**$ 25.60**	**$ 14,081,424**	**$ 26.24**	**$ 14,433,460**	**$ 26.90**	**$ 14,794,297**	**$ 27.57**	**$ 15,164,154**
	$ (3,310,502)		$ (3,310,502)		$ (3,310,502)		$ (3,310,502)		$ (3,310,502)
	$ 10,427,473		$ 10,770,922		$ 11,122,958		$ 11,483,794		$ 11,853,652
	$ (7,872,144)		$ (7,872,144)		$ (7,872,144)		$ (7,872,144)		$ (7,872,144)
	1.32		1.37		1.41		1.46		1.51
	$ 2,555,328		**$ 2,898,778**		**$ 3,250,813**		**$ 3,611,650**		**$ 3,981,507**

DCF @ 7.5% Scenario

		2011		2012		2013		2014		2015	
Potential Gross Income		Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual
Grocery Store		$ 36.75	$ 2,006,550	$ 37.67	$ 2,056,714	$ 38.61	$ 2,108,132	$ 39.58	$ 2,160,835	$ 40.57	$ 2,214,856
Retail		$ 55.32	$ 851,997	$ 56.71	$ 873,297	$ 58.13	$ 895,130	$ 59.58	$ 917,508	$ 61.07	$ 940,446
Residential		$ 33.02	$ 15,849,376	$ 33.84	$ 16,245,610	$ 34.69	$ 16,651,750	$ 35.56	$ 17,068,044	$ 36.45	$ 17,494,745
Parking Income			$ -		$ -		$ -		$ -		$ -
Less Absorption and Concessions Loss			$ (12,362,513)		$ (4,754,813)		$ -				
Less Retail Tenant Leaseup/Rollover		50.0%	$ (425,999)	25.0%	$ (218,324)	10.0%	$ (89,513)	10.0%	$ (91,751)	10.0%	$ (94,045)
Gross Income		$ 10.76	$ 5,919,411	$ 25.82	$ 14,202,484	$ 35.57	$ 19,565,498	$ 36.46	$ 20,054,636	$ 37.37	$ 20,556,002
Residential Losses											
Vacancy		5.0%	$ (174,343)	5.0%	$ (574,540)	5.0%	$ (832,588)	5.0%	$ (853,402)	5.0%	$ (874,737)
Collection Loss		1.0%	$ (34,869)	1.0%	$ (114,908)	1.0%	$ (166,518)	1.0%	$ (170,680)	1.0%	$ (174,947)
Effective Gross Income		**$ 10.38**	**$ 5,710,200**	**$ 24.57**	**$ 13,513,036**	**$ 33.76**	**$ 18,566,393**	**$ 34.60**	**$ 19,030,553**	**$ 35.46**	**$ 19,506,317**
Operating Expenses											
Property Taxes			$ (1,122,561)		$ (1,150,625)		$ (1,179,391)		$ (1,208,875)		$ (1,239,097)
Operating Expenses Residential	27.0%	$ 2,215.18	$ (941,453)	$ 7,300.04	$ (3,102,515)	$ 10,578.76	$ (4,495,973)	$ 10,843.23	$ (4,608,372)	$ 11,114.31	$ (4,723,581)
Total Operating Expenses		$ 3.75	$ (2,064,014)	$ 7.73	$ (4,253,140)	$ 10.32	$ (5,675,363)	$ 10.58	$ (5,817,247)	$ 10.84	$ (5,962,679)
Net Operating Income		**$ 6.63**	**$ 3,646,186**	**$ 16.84**	**$ 9,259,896**	**$ 23.44**	**$ 12,891,030**	**$ 24.02**	**$ 13,213,306**	**$ 24.62**	**$ 13,543,639**
Other Deductions											
Capital Reserves		$ 300.00	$ 127,500	$ 307.50	$ 130,688	$ 315.19	$ 133,955	$ 323.07	$ 137,304	$ 331.14	$ 140,736
Total Other Deductions		$ 0.23	$ 127,500	$ 0.24	$ 130,688	$ 0.24	$ 133,955	$ 0.25	$ 137,304	$ 0.26	$ 140,736
Cash Flow Before Ground Lease		**$ 6.40**	**$ 3,518,686**	**$ 16.60**	**$ 9,129,208**	**$ 23.19**	**$ 12,757,076**	**$ 23.77**	**$ 13,076,002**	**$ 24.37**	**$ 13,402,902**
Ground Lease Payment			$ (3,310,502)		$ (3,310,502)		$ (3,310,502)		$ (3,310,502)		$ (3,310,502)
Cash Flow After Lease Before Debt			$ 208,183		$ 5,818,706		$ 9,446,573		$ 9,765,500		$ 10,092,400
Debt Service			$ (7,872,144)		$ (7,872,144)		$ (7,872,144)		$ (7,872,144)		$ (7,872,144)
DSCR			0.03		0.74		1.20		1.24		1.28
Net Cash Flow After Debt Service			**$ (7,663,961)**		**$ (2,053,438)**		**$ 1,574,429**		**$ 1,893,356**		**$ 2,220,256**

DCF @ 7.5% Scenario

Calculation of Reversion Value

Terminal Net Operating Income	$ 15,323,384	
Going-In Cap Rate	5.50%	
Terminal Capitalization Rate	6.50%	
Anticipated Value in 2020	$ 235,744,369	
Mortgage Pay-Off	$ 81,432,172	
Deed and Transfer Taxes	$ 6,836,587	2.90%
Seller's Commission	$ 7,072,331	3.00%
Net Proceeds at Sale	$ 140,403,279	

LEVERED IRR		**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Net Cash Flow After Debt Service		$ (7,663,961)	$ (2,053,438)	$ 1,574,429	$ 1,893,356	$ 2,220,256	$ 2,555,328	$ 2,898,778	$ 3,250,813	$ 3,611,650	$ 3,981,507
Proceeds from Sale (Reversion)											$ 140,403,279
Total Cash Flow	($ 42,572,383)	$ (7,663,961)	$ (2,053,438)	$ 1,574,429	$ 1,893,356	$ 2,220,256	$ 2,555,328	$ 2,898,778	$ 3,250,813	$ 3,611,650	$ 144,384,786
Discount Rate		13.0%									
Net Present Value of Cash Flows		($ 76,678)									
Levered IRR		**12.98%**									

UNLEVERED IRR		**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Net Cash Flow After Ground Lease		$ 208,183	$ 5,818,706	$ 9,446,573	$ 9,765,500	$ 10,092,400	$ 10,427,473	$ 10,770,922	$ 11,122,958	$ 11,483,794	$ 11,853,652
Proceeds from Sale (Reversion)											$ 221,835,451
Total Cash Flow	($ 136,393,668)	$ 208,183	$ 5,818,706	$ 9,446,573	$ 9,765,500	$ 10,092,400	$ 10,427,473	$ 10,770,922	$ 11,122,958	$ 11,483,794	$ 233,689,103
Discount Rate		13.0%									
Net Present Value of Cash Flows		($ 24,073,265)									
Unlevered IRR		**10.02%**									

RETURN ON COST (Stabilized)	
Total Development Cost (inc. land)	$ 191,146,334
Stabilized NOI (Year 3)	$ 12,891,030
Return on Cost	**6.74%**

Other Assumptions/Conditions	
Building Size	550,027
CPI	2.50%
Property Taxes and OpEx Escalation	2.50%

DCF @ 7.5% Scenario

2016		2017		2018		2019		2020	
Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual
$ 41.58	$ 2,270,227	$ 42.62	$ 2,326,983	$ 43.68	$ 2,385,157	$ 44.78	$ 2,444,786	$ 45.90	$ 2,505,906
$ 62.59	$ 963,957	$ 64.16	$ 988,056	$ 65.76	$ 1,012,757	$ 67.41	$ 1,038,076	$ 69.09	$ 1,064,028
$ 37.36	$ 17,932,114	$ 38.29	$ 18,380,417	$ 39.25	$ 18,839,927	$ 40.23	$ 19,310,925	$ 41.23	$ 19,793,698
	$ -		$ -		$ -		$ -		$ -
10.0%	$ (96,396)	10.0%	$ (98,806)	10.0%	$ (101,276)	10.0%	$ (103,808)	10.0%	$ (106,403)
$ 38.31	$ 21,069,902	$ 39.26	$ 21,596,649	$ 40.25	$ 22,136,566	$ 41.25	$ 22,689,980	$ 42.28	$ 23,257,229
5.0%	$ (896,606)	5.0%	$ (919,021)	5.0%	$ (941,996)	5.0%	$ (965,546)	5.0%	$ (989,685)
1.0%	$ (179,321)	1.0%	$ (183,804)	1.0%	$ (188,399)	1.0%	$ (193,109)	1.0%	$ (197,937)
$ 36.35	**$ 19,993,975**	**$ 37.26**	**$ 20,493,824**	**$ 38.19**	**$ 21,006,170**	**$ 39.15**	**$ 21,531,324**	**$ 40.12**	**$ 22,069,607**
	$ (1,270,075)		$ (1,301,827)		$ (1,334,372)		$ (1,367,732)		$ (1,401,925)
$ 11,392.17	$ (4,841,671)	$ 11,676.97	$ (4,962,712)	$ 11,968.89	$ (5,086,780)	$ 12,268.12	$ (5,213,950)	$ 12,574.82	$ (5,344,299)
$ 11.11	$ (6,111,745)	$ 11.39	$ (6,264,539)	$ 11.67	$ (6,421,153)	$ 11.97	$ (6,581,681)	$ 12.27	$ (6,746,223)
$ 25.24	**$ 13,882,230**	**$ 25.87**	**$ 14,229,285**	**$ 26.52**	**$ 14,585,017**	**$ 27.18**	**$ 14,949,643**	**$ 27.86**	**$ 15,323,384**
$ 339.42	$ 144,255	$ 347.91	$ 147,861	$ 356.61	$ 151,557	$ 365.52	$ 155,346	$ 374.66	$ 159,230
$ 0.26	$ 144,255	$ 0.27	$ 147,861	$ 0.28	$ 151,557	$ 0.28	$ 155,346	$ 0.29	$ 159,230
$ 24.98	**$ 13,737,975**	**$ 25.60**	**$ 14,081,424**	**$ 26.24**	**$ 14,433,460**	**$ 26.90**	**$ 14,794,297**	**$ 27.57**	**$ 15,164,154**
	$ (3,310,502)		$ (3,310,502)		$ (3,310,502)		$ (3,310,502)		$ (3,310,502)
	$ 10,427,473		$ 10,770,922		$ 11,122,958		$ 11,483,794		$ 11,853,652
	$ (7,872,144)		$ (7,872,144)		$ (7,872,144)		$ (7,872,144)		$ (7,872,144)
	1.32		1.37		1.41		1.46		1.51
	$ 2,555,328		**$ 2,898,778**		**$ 3,250,813**		**$ 3,611,650**		**$ 3,981,507**

DCF Residential-Only Scenario

		2011		2012		2013		2014		2015	
Potential Gross Income		Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual
Residential		$ 33.02	$ 15,849,376	$ 33.84	$ 16,245,610	$ 34.69	$ 16,651,750	$ 35.56	$ 17,068,044	$ 36.45	$ 17,494,745
Parking Income			$ -		$ -		$ -		$ -		$ -
Less Absorption and Concessions Loss			$ (12,362,513)		$ (4,754,813)		$ -				
Gross Income		$ 6.29	$ 3,486,863	$ 20.73	$ 11,490,797	$ 30.03	$ 16,651,750	$ 30.78	$ 17,068,044	$ 31.55	$ 17,494,745
Residential Losses											
Vacancy		5.0%	$ (174,343)	5.0%	$ (574,540)	5.0%	$ (832,588)	5.0%	$ (853,402)	5.0%	$ (874,737)
Collection Loss		1.0%	$ (34,869)	1.0%	$ (114,908)	1.0%	$ (166,518)	1.0%	$ (170,680)	1.0%	$ (174,947)
Effective Gross Income		**$ 5.91**	**$ 3,277,651**	**$ 19.48**	**$ 10,801,349**	**$ 28.23**	**$ 15,652,645**	**$ 28.94**	**$ 16,043,961**	**$ 29.66**	**$ 16,445,060**
Operating Expenses											
Property Taxes			$ (829,558)		$ (850,297)		$ (871,554)		$ (893,343)		$ (915,677)
Operating Expenses Residential	27.0%	$ 2,215.18	$ (941,453)	$ 7,300.04	$ (3,102,515)	$ 10,578.76	$ (4,495,973)	$ 10,843.23	$ (4,608,372)	$ 11,114.31	$ (4,723,581)
Total Operating Expenses		$ 3.19	$ (1,771,011)	$ 7.13	$ (3,952,812)	$ 9.68	$ (5,367,527)	$ 9.92	$ (5,501,715)	$ 10.17	$ (5,639,258)
Net Operating Income		**$ 2.72**	**$ 1,506,640**	**$ 12.35**	**$ 6,848,537**	**$ 18.55**	**$ 10,285,118**	**$ 19.01**	**$ 10,542,246**	**$ 19.49**	**$ 10,805,802**
Other Deductions											
Capital Reserves		$ 300.00	$ 127,500	$ 307.50	$ 130,688	$ 315.19	$ 133,955	$ 323.07	$ 137,304	$ 331.14	$ 140,736
Total Other Deductions		$ 0.23	$ 127,500	$ 0.24	$ 130,688	$ 0.24	$ 133,955	$ 0.25	$ 137,304	$ 0.25	$ 140,736
Cash Flow Before Ground Lease		**$ 2.49**	**$ 1,379,140**	**$ 12.12**	**$ 6,717,850**	**$ 18.31**	**$ 10,151,164**	**$ 18.77**	**$ 10,404,943**	**$ 19.24**	**$ 10,665,066**
Ground Lease Payment			**$ (2,889,186)**		**$ (2,889,186)**		**$ (2,889,186)**		**$ (2,889,186)**		**$ (2,889,186)**
Cash Flow After Lease Before Debt			**$ (1,510,046)**		**$ 3,828,664**		**$ 7,261,978**		**$ 7,515,757**		**$ 7,775,880**
Debt Service			$ (6,051,648)		$ (6,051,648)		$ (6,051,648)		$ (6,051,648)		$ (6,051,648)
DSCR			-0.25		0.63		1.20		1.24		1.28
Net Cash Flow After Debt Service			**$ (7,561,694)**		**$ (2,222,984)**		**$ 1,210,330**		**$ 1,464,109**		**$ 1,724,232**

DCF Residential-Only Scenario

Calculation of Reversion Value		
Terminal Net Operating Income	$ 12,225,773	
Going-In Cap Rate	5.50%	
Terminal Capitalization Rate	6.50%	
Anticipated Value in 2020	$ 188,088,823	
Mortgage Pay-Off	$ 67,639,776	
Deed and Transfer Taxes	$ 5,454,576	2.90%
Seller's Commission	$ 5,642,665	3.00%
Net Proceeds at Sale	$ 109,351,807	

LEVERED IRR		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Net Cash Flow After Debt Service		$ (7,561,694)	$ (2,222,984)	$ 1,210,330	$ 1,464,109	$ 1,724,232	$ 1,990,859	$ 2,264,151	$ 2,544,276	$ 2,831,404	$ 3,125,710
Proceeds from Sale (Reversion)											$ 109,351,807
Total Cash Flow	($ 28,145,389)	$ (7,561,694)	$ (2,222,984)	$ 1,210,330	$ 1,464,109	$ 1,724,232	$ 1,990,859	$ 2,264,151	$ 2,544,276	$ 2,831,404	$ 112,477,516
Discount Rate		13.0%									
Net Present Value of Cash Flows		$ 2,696,772									
Levered IRR		**14.00%**									

UNLEVERED IRR		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Net Cash Flow After Ground Lease		$ (1,510,046)	$ 3,828,664	$ 7,261,978	$ 7,515,757	$ 7,775,880	$ 8,042,507	$ 8,315,799	$ 8,595,924	$ 8,883,052	$ 9,177,357
Proceeds from Sale (Reversion)											$ 176,991,582
Total Cash Flow	($ 107,931,737)	$ (1,510,046)	$ 3,828,664	$ 7,261,978	$ 7,515,757	$ 7,775,880	$ 8,042,507	$ 8,315,799	$ 8,595,924	$ 8,883,052	$ 186,168,940
Discount Rate		13.0%									
Net Present Value of Cash Flows		($ 21,217,161)									
Unlevered IRR		**9.72%**									

RETURN ON COST (Stabilized)	
Total Development Cost (inc. land)	$ 155,684,403
Stabilized NOI (Year 3)	$ 10,285,118
Return on Cost	**6.61%**

Other Assumptions/Conditions	
Building Size	554,431
CPI	2.50%
Property Taxes and OpEx Escalation	2.50%

DCF Residential-Only Scenario

2016		2017		2018		2019		2020	
Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual	Sq Ft	Annual
$ 37.36	$ 17,932,114	$ 38.29	$ 18,380,417	$ 39.25	$ 18,839,927	$ 40.23	$ 19,310,925	$ 41.23	$ 19,793,698
	$ -		$ -		$ -		$ -		$ -
$ 32.34	$ 17,932,114	$ 33.15	$ 18,380,417	$ 33.98	$ 18,839,927	$ 34.83	$ 19,310,925	$ 35.70	$ 19,793,698
5.0%	$ (896,606)	5.0%	$ (919,021)	5.0%	$ (941,996)	5.0%	$ (965,546)	5.0%	$ (989,685)
1.0%	$ (179,321)	1.0%	$ (183,804)	1.0%	$ (188,399)	1.0%	$ (193,109)	1.0%	$ (197,937)
$ 30.40	**$ 16,856,187**	**$ 31.16**	**$ 17,277,592**	**$ 31.94**	**$ 17,709,531**	**$ 32.74**	**$ 18,152,270**	**$ 33.56**	**$ 18,606,076**
	$ (938,569)		$ (962,033)		$ (986,084)		$ (1,010,736)		$ (1,036,004)
$ 11,392.17	$ (4,841,671)	$ 11,676.97	$ (4,962,712)	$ 11,968.89	$ (5,086,780)	$ 12,268.12	$ (5,213,950)	$ 12,574.82	$ (5,344,299)
$ 10.43	$ (5,780,239)	$ 10.69	$ (5,924,745)	$ 10.95	$ (6,072,864)	$ 11.23	$ (6,224,686)	$ 11.51	$ (6,380,303)
$ 19.98	**$ 11,075,947**	**$ 20.48**	**$ 11,352,846**	**$ 20.99**	**$ 11,636,667**	**$ 21.51**	**$ 11,927,584**	**$ 22.05**	**$ 12,225,773**
$ 339.42	$ 144,255	$ 347.91	$ 147,861	$ 356.61	$ 151,557	$ 365.52	$ 155,346	$ 374.66	$ 159,230
$ 0.26	$ 144,255	$ 0.27	$ 147,861	$ 0.27	$ 151,557	$ 0.28	$ 155,346	$ 0.29	$ 159,230
$ 19.72	**$ 10,931,693**	**$ 20.21**	**$ 11,204,985**	**$ 20.72**	**$ 11,485,110**	**$ 21.23**	**$ 11,772,238**	**$ 21.76**	**$ 12,066,543**
	$ (2,889,186)		**$ (2,889,186)**		**$ (2,889,186)**		**$ (2,889,186)**		**$ (2,889,186)**
	$ 8,042,507		**$ 8,315,799**		**$ 8,595,924**		**$ 8,883,052**		**$ 9,177,357**
	$ (6,051,648)		$ (6,051,648)		$ (6,051,648)		$ (6,051,648)		$ (6,051,648)
	1.33		1.37		1.42		1.47		1.52
	$ 1,990,859		**$ 2,264,151**		**$ 2,544,276**		**$ 2,831,404**		**$ 3,125,710**